Genealogical Solution for File 07 1Cor.var

for James D. Price

Date: 3/21/2018

Start time: 3:26:51 PM

End time: 3:27:22 PM

Solution type: 8

Number of extant manuscripts = 143

Number of active extant mss = 61

Number of created exemplars = 24

Number of mixture exemplars = 5

Total = 172

Number of Variation Units = 469

Number of Variants = 1056

NumDiagMixA = 0

NumDiagMixB = 846

NumAutoSingleMix1 = 0

NumAutoSingleMix2 = 0

NumSameGenMix = 1030

NumSibMix = 0

NumOptimizeDMix = 147

NumPruneEqualWithParent = 0

NumPruneNonContributers = 0

Global Total Number of Inheritable Minimal Variants: 12371

Global Number of Actually Inherited Minimal Variants: 8167

Global Number of Changed Minimal Variants: 0

Global Number of Corrected Minimal Variants: 0

Global Total Number of Inheritable Variants: 9820

Global Number of Actually Inherited Variants: 9187

Global Number of Changed Variants: 117

Global Number of Corrected Variants: 516

Global Number of Inheritable Autographic readings: 984

Global Number of Actually Autographic readings: 492

Global Number of Changed Autographic readings: 0

Global Number of Corrected Autographic readings: 492

Total Number of ambiguous variants: 922

Total Number of ambiguous variants type A fixed: 775

Total Number of ambiguous variants type B fixed: 0

Total Number of ambiguous variants missed: 7

Number of missed that were recovered: 0

Total Number of binary ambiguous variants fixed: 767

Total Number of non-binary ambiguous variants fixed: 8

Total Number of binary ambiguous variants missed: 7

Total Number of non-binary ambiguous variants Missed: 0

Total Number of NA-27 Choice: 134

Total Number of Arbitrary Choices: 7

Average Affinity of witnesses with parent exemplar: 0.9351

Maximum number of generations: 7

Distribution of the number of variant alternatives:

Num. Alternatives Total

1 9566

2 1248

3 3

Appendix A: List of Extant Witnesses

Name Date Language Content Number of Readings Percent

P^11% 550 0 1:17-22; 2:9, 11-12, 14; 3:2-3; 4:5, 10, 13-17; 5:2-4, 7-8; 6:5-7, 11-15; 7:3-5, 13-14 51 10.87%

P^15% 250 0 7:18-8:3 38 8.10%

P^34% 650 0 16:6, 10 4 0.85%

P^46\* 200 0 1:1-2, 6-13, 15-22, 24-2:1; 2:4-11:15; 11:19-13:10; 13:12-14:14; 14:16-15:54; 16:3-22 442 94.24%

P^46^c 200 0 1:1-2, 6-13, 15-22, 24-2:1; 2:4-6:11; 6:15-11:15; 11:19-13:10; 13:12-14:14; 14:16-15:54; 16:3-22 441 94.03%

P^46^1 200 0 1:1-2, 6-13, 15-22, 24-2:1; 2:4-9:25; 10:3-11:15; 11:19-13:10; 13:12-14:14; 14:16-15:54; 16:3-22 440 93.82%

P^46^2 200 0 1:1-2, 6-13, 15-22, 24-2:1; 2:4-9:25; 10:3-11:15; 11:19-13:10; 13:12-14:14; 14:16-15:54; 16:3-22 440 93.82%

P^61% 700 0 1:1-2; 5:2, 5-6, 9-13 13 2.77%

P^68% 650 0 4:13, 15-5:3 10 2.13%

01\* 350 0 1:1-16:24 469 100.00%

01^c% 1150 0 1:1-2, 6-13, 15-18, 22-26, 29-30; 2:2-14, 16-4:6; 4:10-17; 5:2-6, 8-7:5; 7:10-14, 17-8:3; 8:6-10, 12-9:9; 9:12-13, 16-10:2; 10:4-17, 19-20, 24-31; 11:2-25, 27, 32; 12:2-11, 13-31; 13:3-10, 12-14:5; 14:7-8, 11-12, 14-25, 28-34, 39-15:5; 15:10-54; 16:3, 6-22, 24 372 79.32%

01^1% 550 0 1:1-2, 6-13, 15-18, 22-26, 29-30; 2:2-4:6; 4:10-17; 5:2-6, 8-7:5; 7:10-14, 17-8:3; 8:6-10, 12-9:9; 9:12-13, 16-10:2; 10:4-17, 19-20, 24-31; 11:2-25, 27, 32; 12:2-11, 13-13:10; 13:12-14:5; 14:7-8, 11-12, 14-25, 28-34, 39-15:5; 15:10-16:3; 16:6-22, 24 374 79.74%

01^2 650 0 1:1-2:14; 2:16-12:31; 13:3-16:24 464 98.93%

A\* 450 0 1:1-16:24 466 99.36%

A^c 550 0 1:1-4:10; 4:13-16:24 465 99.15%

B\* 350 0 1:1-16:24 469 100.00%

B^c 350 0 1:1-4, 8-3:13; 3:16-4:10; 4:13-16:7; 16:10-19, 23-24 462 98.51%

B^1 350 0 1:1-4, 8-3:13; 3:16-4:10; 4:13-11:2; 11:5-16:7; 16:10-19, 23-24 461 98.29%

B^2 600 0 1:1-4:10; 4:13-11:2; 11:5-16:24 467 99.57%

C\*% 450 0 1:4-7:17; 9:7-13:5; 15:45-16:24 328 69.94%

C^1% 450 0 1:4-14, 16-18, 22, 24-26, 29-2:16; 3:2-7:7; 7:10-17; 9:8-10:2; 10:4-20, 24-11:25; 11:27, 31-13:5; 15:45-16:24 303 64.61%

C^2% 550 0 1:4-14, 16-18, 22, 24-26, 29-2:16; 3:2-7:17; 9:7-10:20; 10:24-11:25; 11:27, 31-13:5; 15:45-16:24 309 65.88%

C^3% 850 0 1:4-7:7; 7:10-17; 9:7-10:2; 10:4-13:5; 15:45-16:24 322 68.66%

D06\* 550 0 1:1-14:12; 14:23-16:24 455 97.01%

D06^c% 900 0 1:1, 4-18, 22, 24-26, 29-2:14; 3:2-13, 16-4:6; 4:10, 13-5:2; 5:4-6:10; 6:15-7:17; 7:20-8:10; 8:12-10:17; 10:19-23, 27-11:2; 11:5-10, 15, 19, 22-25, 27-32; 12:2-13, 19-13:8; 13:12-14:4; 14:7-8, 11-12, 23-34, 39-15:5; 15:7-15, 24-28, 31-16:7; 16:10-19, 23-24 365 77.83%

D06^1 600 0 1:1-18, 22, 24-26, 29-2:14; 2:16; 3:2-13, 16-4:10; 4:13-6:10; 6:15-7:17; 7:20-8:10; 8:12-9:13; 9:16-10:23; 10:27-11:2; 11:5-15, 19-32; 12:2-13:10; 13:12-14:4; 14:6-8, 11-12, 23-34, 39-15:5; 15:7-15, 24-28, 31-16:7; 16:10-19, 23-24 388 82.73%

D06^2 850 0 1:1-2:15; 3:1-4:6; 4:10, 13-5:2; 5:4-10:17; 10:19-11:10; 11:15-19, 22-25, 27-12:10; 12:12-13, 19-13:8; 13:11-14:5; 14:7-12, 23-16:24 431 91.90%

F\* 850 0 1:1-3:5; 3:16-6:5; 6:15-16:24 455 97.01%

G012\* 850 0 1:1-3:5; 3:16-6:5; 6:15-16:24 455 97.01%

G012^c 900 0 1:1-3:5; 3:16-6:5; 6:15-16:24 455 97.01%

H015\*% 550 0 10:23-29; 11:9-15 13 2.77%

H015^c% 600 0 10:23-29; 11:9-15 13 2.77%

K\*% 850 0 6:15-20; 7:2, 5, 13-17, 20-21, 24-8:3; 8:6-7, 12-13; 9:5, 8-9, 12, 17-20, 22, 25; 10:4-8, 11-17, 19-20, 27-31; 11:2, 5-10, 19, 22-24, 27; 12:2-3, 9-10, 13, 19-20, 24-31; 13:5-8, 11-14:5; 14:7, 12, 15, 18, 21-25, 28-34, 40-15:5; 15:7-15, 25, 28-31, 37-47, 50-51, 54-16:3; 16:6, 12-22 168 35.82%

L019\*% 750 0 1:1, 8-13, 16-18, 22-26, 29-30; 2:4-8, 11-14; 3:3-4, 10, 13, 17-20; 4:5, 10, 13, 15-16; 5:4, 6, 8-6:7; 6:15-20; 7:2, 5, 13-14, 17, 20-21, 24-8:3; 8:6-8, 12-13; 9:5, 8-9, 12, 16-17, 20, 22, 25; 10:4-8, 13-17, 19-20, 27-31; 11:2, 5-10, 19, 22-24, 27; 12:2-3, 9-10, 12-13, 19-20, 24-31; 13:3, 5-8, 12-14:4; 14:7, 12, 15, 18, 21-25, 28-34, 40-15:5; 15:10-15, 25, 28, 31, 37-47, 50-51, 54; 16:3, 6, 12-22 226 48.19%

I% 450 0 10:29; 11:9-10, 19, 27; 12:3, 27; 14:12, 32-33; 15:3, 15, 28, 49-50; 16:2, 12 20 4.26%

P025\*% 850 0 1:1, 8-13, 16-26, 29-30; 2:2-8, 11-15; 3:3-10, 13-4:17; 5:2-6, 8-6:20; 7:2-7, 13-14, 18-8:8; 8:11-9:13; 9:16-17, 20-25; 10:4-17, 19-31; 11:2, 5-15, 19, 22-25, 27; 12:2-10, 12-13, 19-21; 13:8-10, 12-14:5; 14:7-10, 12-13, 15-21, 40-15:5; 15:10-15, 20, 25, 28-47, 50-16:8; 16:12-22 306 65.25%

044\* 1000 0 1:1-16:24 469 100.00%

048% 450 0 2:2-8, 11-14, 16; 3:2-10; 4:5; 5:6-11; 6:5-8; 12:24-13:8; 13:11-14:10; 14:12-25, 28-15:17; 15:25 95 20.26%

075% 500 0 15:29-16:8; 16:12-19, 23-24 42 8.96%

088% 500 0 15:54-16:8 13 2.77%

0121% 950 0 15:52-16:24 28 5.97%

0185% 350 0 2:13; 3:2-3 5 1.07%

0199% 700 0 11:19, 22-24 9 1.92%

0201% 450 0 12:2-3, 9-11, 13; 14:21-28 21 4.48%

0222% 550 0 9:5-7, 12 3 0.64%

0243\*% 950 0 13:4-16:24 121 25.80%

0243^c% 1000 0 13:4-16:24 121 25.80%

0270% 500 0 15:10-15, 24-25 7 1.49%

0278% 850 0 7:37-8:6 24 5.12%

0285% 550 0 4:5-6; 12:24-27; 14:26-33 12 2.56%

0289% 1300 0 2:11-3:1; 3:3-4:11; 13:13; 14:4-5, 7-11, 13, 15, 18 50 10.66%

1 1150 0 1:1-16:24 469 100.00%

6 1250 0 1:1-16:24 469 100.00%

33\* 850 0 1:1-16:24 469 100.00%

42 1050 0 1:1-16:24 469 100.00%

69 1450 0 1:1-16:24 469 100.00%

81\*% 1044 0 1:1-2, 6-26, 29-30; 2:2-8, 11-16; 3:3-14, 17-20; 4:5-10, 13, 15-5:4; 5:6-6:11; 6:15-7:9; 7:13-8:8; 8:11-13; 9:5-13, 17-10:2; 10:4-17, 19-31; 11:2, 5-19, 22-24, 27, 34-12:10; 12:12-13, 19-20, 24-13:3; 13:5-10, 12-14:4; 14:7-13, 15-37, 39-15:5; 15:7-15, 20, 25, 28-47, 50-51, 54-16:8; 16:12-19, 24 357 76.12%

104\*% 1087 0 1:1, 8-13, 15-18, 22-26, 29-30; 2:4-8, 11-14; 3:3-4, 10, 13, 17-4:6; 4:10, 13-17; 5:2, 4-6, 8-6:11; 6:15-20; 7:2, 5, 13-14, 17-8:3; 8:6-8, 11-9:12; 9:16-17, 20, 22-10:2; 10:4-17, 19-20, 27-31; 11:2, 5-10, 17-19, 22-24, 27, 32; 12:2-3, 9-10, 12-13, 19-13:10; 13:12-14:4; 14:7-8, 12, 15-25, 28-34, 40-15:5; 15:10-15, 25, 28-31, 37-47, 50-51, 54-16:3; 16:6, 12-19 286 60.98%

131\* 1350 0 1:1-16:24 469 100.00%

309 1250 0 1:1-16:24 469 100.00%

323\* 1150 0 1:1-16:24 469 100.00%

326 950 0 1:1-16:24 469 100.00%

365% 1150 0 1:1, 8-13, 15-18, 22, 24-26, 29-30; 2:2-8, 10-15; 3:3-4, 10, 13, 17-4:6; 4:10, 13-16; 5:2, 4-6, 8-6:7; 6:10-11, 15-20; 7:2, 5, 13-14, 17-21, 24-8:3; 8:6-8, 11-9:1; 9:5, 8-12, 17-10:2; 10:4-9, 13-17, 19-20, 27-31; 11:2, 5-10, 15-19, 22-25, 27; 12:2-10, 12-13, 19-31; 13:5-10, 12-14:5; 14:7, 10, 12, 15-18, 21-25, 28-34, 40-15:5; 15:10-15, 20, 25, 28-47, 50-51, 54-16:3; 16:6-8, 12-22 286 60.98%

440 1150 0 1:1-16:24 469 100.00%

491 1050 0 1:1-16:24 469 100.00%

614\* 1250 0 1:1-16:24 469 100.00%

629 1350 0 1:1-16:24 469 100.00%

630% 1300 0 1:1, 8-13, 15-22, 24-26, 29-30; 2:2-8, 10-15; 3:3-13, 16-20; 4:5-17; 5:2-6, 8-6:7; 6:10-11, 15-20; 7:2-7, 13-14, 17-8:3; 8:6-8, 11-9:1; 9:5-9, 12-13, 17, 20-22, 25-10:2; 10:4-20, 24-31; 11:2, 5-15, 19, 22-24, 26-27; 12:2-10, 13, 19-20, 24-31; 13:3, 5-8, 12-14:4; 14:6-8, 12-13, 15, 18-34, 39-15:15; 15:20, 25-51, 54-16:6; 16:12-19, 24 313 66.74%

945 1050 0 1:1-16:24 469 100.00%

1175\*% 950 0 1:1-2, 6-13, 15-30; 2:2-8, 10-14; 3:1, 3-13, 16-4:10; 4:13-5:4; 5:6-6:10; 6:15-20; 7:2-5, 13-21, 24-8:8; 8:11-9:1; 9:5-25; 10:4-17, 19-20, 24-31; 11:2, 5-19, 22-25, 27, 32; 12:2-13, 19-20, 24-13:10; 13:12-14:4; 14:7, 10-12, 15-34, 39-15:5; 15:7-15, 20, 25, 28-47, 50-51, 54-16:7; 16:12-19 356 75.91%

1175^c% 1000 0 1:1-2, 6-13, 15-30; 2:2-8, 10-14; 3:1, 3-13, 16-4:10; 4:13-5:4; 5:6-6:10; 6:15-20; 7:2-5, 13-21, 24-8:8; 8:11-9:1; 9:5-25; 10:4-17, 19-20, 24-31; 11:2, 5-19, 22-25, 27, 32; 12:2-13, 19-20, 24-13:10; 13:12-14:4; 14:7, 10-12, 15-34, 39-15:5; 15:7-15, 20, 25, 28-47, 50-51, 54-16:7; 16:12-19 355 75.69%

1241\*% 1150 0 1:1, 8-13, 16-18, 22-26, 29-30; 2:2-8 26 5.54%

1505\*% 1150 0 1:1, 8-13, 16-18, 22, 24-26, 29-30; 2:2-8, 11-14; 3:3-4, 10, 13-14, 17-4:5; 4:10, 13, 15-17; 5:4, 6, 8-6:7; 6:10, 15-20; 7:2, 5, 9-14, 17, 20-8:3; 8:6-8, 11-13; 9:5-13, 17, 20, 22, 25-10:2; 10:4-8, 10-17, 19-20, 27-31; 11:2, 5-10, 15, 19, 22-24, 27; 12:2-10, 12-20, 24-31; 13:3, 5-8, 12-14:5; 14:7-8, 11-12, 15, 18, 21-25, 28-34, 40-15:5; 15:10-15, 24-47, 50-51, 54; 16:3, 6, 12-22 261 55.65%

1506% 1320 0 1:8-13, 15-22, 24-30; 2:2-8, 11-14; 3:3-13, 17-20; 4:5, 9-10, 13, 15 57 12.15%

1611 950 0 1:1-16:24 469 100.00%

1739\* 900 0 1:1-16:24 469 100.00%

1739^c 950 0 1:1-16:24 469 100.00%

1881\* 1350 0 1:1-16:24 469 100.00%

1881^c 1400 0 1:1-16:24 469 100.00%

2138 1072 0 1:1-16:24 469 100.00%

2464\*% 850 0 1:1, 8-13, 16-26, 29-30; 2:2-8, 11-14; 3:3-4, 10, 13, 17-4:5; 4:10-13, 15-17; 5:2, 4, 6-6:8; 6:11, 15-7:7; 7:13-14, 17-21, 24-8:8; 8:12-13; 9:5-13, 17-10:2; 10:4-31; 11:2, 5-15, 19, 22-24, 26-27; 12:2-10, 12-13, 19-20, 24-31; 13:4-8, 12-14:4; 14:7-10, 12-13, 15-25, 28-34, 39-15:5; 15:10-15, 20, 25, 28-47, 50-51, 54; 16:3-8, 12-19 305 65.03%

2495 1450 0 1:1-16:24 469 100.00%

pm^a 850 0 1:1-16:24 469 100.00%

pm^b 850 0 1:1-16:24 469 100.00%

TR 1892 0 1:1-16:24 469 100.00%

HF 1982 0 1:1-16:24 469 100.00%

RP 2005 0 1:1-16:24 469 100.00%

NA-27 1979 0 1:1-16:24 469 100.00%

vg\* 400 1 1:1-18, 22-2:1; 2:4-8, 10-14, 16; 3:3-4:10; 4:13-5:1; 5:3-4, 6-6:20; 7:2-5, 13-17, 20-9:1; 9:5-10:17; 10:19-11:2; 11:5-24, 26-29, 34-12:13; 12:19-31; 13:3-10, 12-14:12; 14:14-15, 18-37, 39-15:6; 15:10-15, 20-51, 54-16:19; 16:24 383 81.66%

vg^a 400 1 1:1-18, 22-2:1; 2:4-8, 10-14, 16; 3:3-4:10; 4:13-5:1; 5:3-4, 6-6:20; 7:2-5, 13-17, 20-9:1; 9:5-10:17; 10:19-11:2; 11:5-24, 26-29, 34-12:13; 12:19-31; 13:3-10, 12-14:12; 14:14-15, 18-37, 39-15:6; 15:10-15, 20-51, 54-16:19; 16:24 383 81.66%

vg^b 400 1 1:1-18, 22-2:1; 2:4-8, 10-14, 16; 3:3-4:10; 4:13-5:1; 5:3-4, 6-6:20; 7:2-5, 13-17, 20-9:1; 9:5-10:17; 10:19-11:2; 11:5-24, 26-29, 34-12:13; 12:19-31; 13:3-10, 12-14:12; 14:14-15, 18-37, 39-15:6; 15:10-15, 20-51, 54-16:19; 16:24 383 81.66%

vg^cl 1592 1 1:1-18, 22-2:1; 2:4-8, 10-14, 16; 3:3-4:10; 4:13-5:1; 5:3-7:7; 7:13-17, 20-9:1; 9:5-10:17; 10:19-11:2; 11:5-24, 26-29, 34-12:13; 12:19-31; 13:3-14:12; 14:14-15, 18-37, 39-15:6; 15:10-15, 20-51, 54-16:24 401 85.50%

vg^st 1994 1 1:1-14, 16-18, 22-26, 29-30; 2:4-8, 10-14; 3:3-4:10; 4:13-5:1; 5:3-6:11; 6:15-7:7; 7:13-17, 20-21, 24-8:13; 9:5-9, 12-10:17; 10:19-11:2; 11:5-14, 19-24, 26-29, 34-12:13; 12:19-31; 13:3-14:8; 14:11-12, 14-15, 18-37, 39-15:6; 15:10-15, 20-51, 54-16:19; 16:24 380 81.02%

it-ar 950 1 1:1-18, 22-26, 29-2:1; 2:4-8, 10-14, 16; 3:3-4:10; 4:13-5:1; 5:3-7:7; 7:13-17, 20-9:1; 9:5-10:17; 10:19-11:2; 11:5-24, 26-29, 34-12:13; 12:19-31; 13:3-14:12; 14:14-15, 18-34, 40-15:6; 15:10-15, 20-51, 54-16:19; 16:23-24 393 83.80%

it-b\* 450 1 1:1-18, 22-2:1; 2:4-8, 10-14, 16; 3:2-4:10; 4:13-5:1; 5:3-7:7; 7:13-17, 20-9:1; 9:5-10:17; 10:19-11:2; 11:5-24, 26-29, 34-12:13; 12:19-31; 13:3-14:12; 14:14-15, 18-15:6; 15:10-15, 20-51, 54-16:19; 16:23-24 402 85.71%

it-d 450 1 1:1-18, 22-26, 29-30; 2:4-8, 10-14, 16; 3:3-4:10; 4:13-5:1; 5:3-4, 6-6:20; 7:2-7, 13-17, 20-21, 24-8:13; 9:5-9, 12-10:17; 10:19-11:2; 11:5-14, 17-24, 26-29, 34-12:13; 12:19-31; 13:3-10, 12-14:8; 14:11-12, 14-15, 18-37, 39-15:6; 15:10-15, 20-51, 54-16:19; 16:23-24 378 80.60%

it-e% 450 1 1:1-14, 16-18, 22-26, 29-30; 2:4-8, 10-14; 3:3-4:10; 4:13-5:1; 5:3-4, 6-6:11; 6:15-20; 7:2-5, 13-17, 20-21, 24-8:13; 9:5-9, 12-10:17; 10:19-11:2; 11:5-14, 19-24, 26-29, 34-12:13; 12:19-31; 13:3-10, 12-14:8; 14:11-12, 14-15, 18-37, 39-15:6; 15:10-15, 20-51, 54-16:19; 16:24 363 77.40%

it-f\* 550 1 1:1-18, 22-30; 2:4-8, 10-14, 16; 3:3-4:10; 4:13-5:1; 5:3-4, 6-6:20; 7:2-7, 13-17, 20-21, 24-8:13; 9:5-9, 12-10:17; 10:19-11:2; 11:5-24, 26-29, 34-12:13; 12:19-31; 13:3-10, 12-14:8; 14:11-12, 14-15, 18-37, 39-15:6; 15:10-15, 20-51, 54-16:19; 16:23-24 381 81.24%

it-g% 800 1 1:1, 8-13, 15-18, 22, 24-26, 29-30; 2:4-8, 11-14, 16; 3:3-4, 10, 13, 17-20; 4:5, 10, 13, 15-16; 5:4, 6, 8-6:7; 6:14-15, 19-20; 7:2, 5-7, 13-14, 17, 20-21, 24-8:3; 8:6-8, 12-13; 9:5-9, 12, 17, 20, 22, 25; 10:4-8, 13-17, 19-20, 27-31; 11:2, 5-10, 15, 19, 22-24, 27-29; 12:2-3, 9-10, 13, 19-20, 24-31; 13:5-8, 12-14:4; 14:7, 10, 12, 15, 18, 21-25, 28-34, 40-15:5; 15:10-15, 25, 28, 31, 37-47, 50-51, 54; 16:3, 6, 12-19, 23 227 48.40%

it-r% 700 1 1:1-18, 22-2:1; 2:4-8, 10-14, 16; 3:3-5; 6:1-7:7; 7:20-24; 13:13-14:5; 14:11-12, 14-15, 18; 15:14-15, 20-51, 54-16:19; 16:23-24 144 30.70%

it-t% 1000 1 1:8-10, 17-18, 22; 2:8; 3:10, 13, 17-20; 4:5, 10, 13, 15; 5:8; 6:14-15, 19-20; 7:2, 5-7, 13-14, 28-34, 37-40; 9:7-9, 12, 17; 10:16-17, 19-23, 27-31; 11:2, 23-24, 26-29; 12:2-3, 9-10, 13, 27-31; 13:5-8; 15:2-5, 10, 37-47, 50-51, 54 111 23.67%

sa^a% 250 1 1:1-13, 15-18, 22-26, 29-2:1; 2:4-8, 10-14, 16; 3:2-13, 17-4:6; 4:10, 13, 15-5:1; 5:3-6:7; 6:11-15, 19-7:5; 7:13-17, 20-21, 24-9:1; 9:5-9, 12-13, 16-20, 22, 25; 10:3-17, 19-31; 11:2, 5-14, 19-24, 26-29; 12:2-3, 9-10, 13, 19-20, 24-31; 13:3-10, 12-14:4; 14:7, 10-12, 14-15, 18, 21-38, 40-15:5; 15:10-15, 20, 25, 28-31, 37-51, 54-16:3; 16:6-7, 10-19, 23-24 319 68.02%

sa^b% 250 1 1:1-26, 29-30; 2:4-8, 10-14, 16; 3:2-13, 17-4:6; 4:10, 13, 15-16; 5:1, 3-6, 8-6:7; 6:14-15, 19-7:5; 7:13-14, 17, 20-21, 24-8:10; 8:12-9:1; 9:5, 8-9, 12-13, 16-20, 22, 25; 10:3-9, 13-17, 19-31; 11:2, 5-10, 19-24, 27-29; 12:2-3, 9-10, 12-13, 19-20, 24-31; 13:3, 5-10, 12-14:4; 14:7, 10-12, 15, 18, 21-34, 38, 40-15:5; 15:10-15, 20, 25, 28-31, 37-47, 50-51, 54; 16:3, 6-7, 12-19 295 62.90%

bo^a% 250 1 1:1-13, 15-18, 22-26, 29-2:1; 2:4-8, 10-14, 16; 3:2-13, 17-4:6; 4:10, 13, 15-5:1; 5:3-6:7; 6:11-15, 19-7:5; 7:13-17, 20-21, 24-9:1; 9:5-9, 12-13, 16-20, 22, 25; 10:3-10, 13-17, 19-31; 11:2, 5-14, 19-24, 26-29; 12:2-3, 9-10, 12-13, 19-20, 24-31; 13:3, 5-10, 12-14:4; 14:7, 10-12, 14-15, 18, 21-34, 38, 40-15:5; 15:10-15, 20, 25, 28-31, 37-51, 54-16:3; 16:6-7, 10-19, 23-24 322 68.66%

bo^b% 250 1 1:1-26, 29-2:1; 2:4-8, 10-14, 16; 3:2-13, 17-4:6; 4:10, 13, 15-5:1; 5:3-6:7; 6:11-15, 19-7:5; 7:13-17, 20-21, 24-9:1; 9:5-9, 12-13, 16-20, 22, 25; 10:3-10, 13-17, 19-31; 11:2, 5-14, 19-24, 26-29; 12:2-3, 9-10, 12-13, 19-20, 24-31; 13:3-10, 12-14:4; 14:7, 10-12, 14-15, 18, 21-34, 38, 40-15:5; 15:10-15, 20, 25, 28-31, 37-51, 54-16:3; 16:6-7, 10-19, 23-24 326 69.51%

sy^h% 616 1 1:1-13, 15-22, 24-2:1; 2:4-8, 10-14, 16; 3:2-13, 17-4:10; 4:13, 15-5:1; 5:3-4, 6-6:10; 6:14-7:7; 7:13-17, 20-9:25; 10:4-17, 19-31; 11:2, 5-15, 19-24, 26-31, 34-12:3; 12:9-13, 19-31; 13:3-14:4; 14:7, 10, 12, 14-15, 18-15:6; 15:10-15, 20, 25, 28-31, 37-47, 50-51, 54-16:3; 16:6-7, 10-24 359 76.55%

sy^p% 425 1 1:1-22, 24-2:1; 2:4-8, 10-14, 16; 3:3-13, 17-4:10; 4:13, 15-5:1; 5:3-6:7; 6:10-11, 15-7:7; 7:13-17, 20-8:10; 8:12-9:12; 9:16-25; 10:3-17, 19-31; 11:2, 5-15, 19-24, 26-31, 34-12:13; 12:19-31; 13:4-14:4; 14:7, 10, 12, 14-15, 18, 21-15:5; 15:10-15, 20, 25, 28-31, 37-47, 50-51, 54-16:3; 16:6-7, 10-24 358 76.33%

l^249 850 0 1:1-16:24 469 100.00%

l\* 850 0 1:1-16:24 469 100.00%

l^846 850 0 1:1-16:24 469 100.00%

l^1575 850 0 1:1-16:24 469 100.00%

l^2211\* 995 0 1:1-16:24 469 100.00%

l^2211^c 995 0 1:1-16:24 469 100.00%

Ambst% 366 1 1:1-2, 6-8, 11, 14, 18, 22, 28; 2:1, 13, 16; 3:3, 5, 13, 16-17; 4:9, 17; 5:3-6; 6:11-14, 19; 7:1, 5-7, 14, 17, 20, 32-34, 39-40; 8:2, 7, 11, 13-9:1; 9:5-7, 9-10, 13-16, 18; 10:8, 10, 13, 17, 20-23, 27-28; 11:2, 15-19, 23-24, 27-29, 34-12:3; 12:9, 12, 21, 27-31; 13:3-4, 11; 14:6-7, 10, 12, 14, 19, 33-37, 39-15:3; 15:10, 14-15, 27-28, 31, 50-51, 54; 16:6, 12-19, 23-24 123 26.23%

BasA% 374 1 2:1 1 0.21%

Cl^a% 215 0 1:20, 23-24; 2:9-10, 13, 15; 3:1-3, 10-13; 4:9, 11-13; 5:7; 6:8-10, 16; 7:3-7, 10, 38-40; 8:2-3, 7-8, 11, 13; 9:20, 22, 25; 10:20-24; 11:3, 27, 31-34; 12:9-11, 13; 13:2, 4, 8, 11, 13; 14:6, 10-11; 15:49-50 78 16.63%

Cl^b% 215 0 1:20, 23-24; 2:9-10, 13-15; 3:1-3, 10-13; 4:9, 11-13, 15; 5:7; 6:8-10, 16; 7:3-7, 10, 38-40; 8:2-3, 7-8, 11, 13; 9:20, 22, 25; 10:20-24; 11:3, 27, 31-34; 12:9-11, 13; 13:2, 4-8, 11-13; 14:6, 10-11; 15:49-50 82 17.48%

Cyp^a% 258 1 1:18, 22; 3:3; 6:2, 11, 16; 7:7, 32-34, 39; 8:2, 13; 9:22; 10:23; 11:19, 24, 26; 14:34; 15:54 25 5.33%

Did^a% 398 0 2:9, 15; 3:3, 10; 5:2; 7:29; 12:3, 9, 27 10 2.13%

Did^b% 398 0 9:22 1 0.21%

Epiph^a% 403 0 1:20; 2:10, 16; 3:12, 16; 5:5, 7; 6:11; 7:5, 10, 34, 39; 9:9; 10:3, 11, 20; 12:6, 27; 14:19, 34; 15:14, 25, 28-29 29 6.18%

Epiph^b% 403 0 1:20; 2:10, 16; 3:12, 16, 20; 5:5, 7; 6:11; 7:5, 10, 34, 39; 9:9; 10:3, 11, 20; 12:6, 27; 14:15, 19, 34; 15:14, 25, 28-29 31 6.61%

Eus^a% 339 0 1:6; 4:13; 7:31, 34-35; 9:10, 13; 12:31; 15:54 11 2.35%

Eus^b% 339 0 1:6; 4:13; 7:31, 34-35; 9:10, 13; 12:31; 15:54 11 2.35%

Hier^a% 420 1 13:3; 15:51 2 0.43%

Hier^b% 420 1 13:3; 15:51 2 0.43%

Hipp% 235 0 2:1 1 0.21%

Ir% 150 0 3:3, 17; 15:50 4 0.85%

Irarm% 400 1 5:11; 6:10, 15; 10:11 5 1.07%

Irlat^a% 395 1 2:15; 3:16-17; 5:6; 6:10-15, 20; 7:14; 8:6, 11; 10:3, 8-11, 16; 12:6; 13:10, 12; 15:3, 14-20, 27-28, 45, 49-50, 54 38 8.10%

Irlat^b% 395 1 6:14; 10:11, 16; 15:50, 54 5 1.07%

Lcf% 371 1 5:3-6; 6:16 5 1.07%

McionA% 150 0 15:47 1 0.21%

McionE% 150 0 3:20; 14:19-21, 34 4 0.85%

McionT% 150 0 15:25, 50 3 0.64%

Meth% 250 0 6:10, 14-20; 13:11 8 1.71%

Or^a% 254 0 1:28; 3:3, 13; 4:6; 8:8; 9:9-10; 10:2-3; 11:19; 12:31; 13:10, 12; 15:5-6, 50 17 3.62%

Or^b% 254 0 1:28; 3:3, 13; 4:6; 8:8; 9:9-10; 10:2-3; 11:19; 12:31; 13:10, 12; 15:5-6, 50 17 3.62%

Or^lat^a% 254 1 1:23 1 0.21%

Pel% 418 1 2:11, 16; 3:5; 5:3; 7:1; 9:1, 5-7, 15; 11:24, 29; 12:2-3, 31; 13:11; 14:6-7, 12, 18; 15:31; 16:15, 19, 24 26 5.54%

Ptol^Ir% 180 0 1:18; 2:14-15; 11:10 4 0.85%

Spec% 450 0 1:20; 2:10-11, 13; 6:10, 16; 7:34; 10:20, 31; 12:3, 31; 14:12; 15:51 16 3.41%

Tert% 220 1 1:14-15, 22, 28; 3:16-17; 4:9; 5:5, 10; 6:11-14; 7:13-14, 32-34, 39-40; 8:8; 9:1, 5, 15; 10:23, 28; 13:3, 11; 15:28, 51, 54 32 6.82%

Table 6.2: Distribution of Parents:

Number of Parents Number of Witnesses

 1 30

 2 27

 3 28

 4 16

 5 22

 6 12

 7 10

 8 8

 9 7

10 5

11 2

12 1

13 1

15 2

total = 738; Mixture index = 4.986

List of Mss with multiple parents:

MSS with 2 parents: P^61%; A\*; H015\*%; 088%; 0270%; 69; 1506%; 1611; 2138; pm^b; l^846; l^1575; Did^a%; Hier^a%; Ir%; McionA%; McionE%; Meth%; Ptol^Ir%; Ex-146; Ex-149; Ex-155#; Ex-165#; Ex-166#; Ex-168$; Ex-169$; Ex-170$;

MSS with 3 parents: P^11%; P^15%; A^c; B^2; H015^c%; K\*%; I%; 075%; 0121%; 0201%; 0285%; 323\*; 1881^c; 2495; vg^st; it-e%; Eus^a%; Eus^b%; Irarm%; Irlat^b%; Lcf%; McionT%; Or^b%; Ex-144; Ex-156; Ex-159; Ex-162; Ex-163;

MSS with 4 parents: 01^c%; 048%; 0289%; 1739^c; HF; RP; NA-27; it-f\*; it-t%; Cyp^a%; Epiph^a%; Or^a%; Spec%; Ex-152; Ex-161; Ex-164;

MSS with 5 parents: P^46\*; 01\*; L019\*%; 0243\*%; 945; 1739\*; 1881\*; vg^cl; it-d; it-g%; it-r%; sa^b%; bo^a%; bo^b%; l^249; Epiph^b%; Irlat^a%; Pel%; Ex-148; Ex-154; Ex-157; Ex-160;

MSS with 6 parents: 01^1%; 01^2; D06^1; 044\*; 104\*%; 614\*; TR; vg^b; sa^a%; Cl^a%; Cl^b%; Tert%;

MSS with 7 parents: P025\*%; 0243^c%; 630%; 1175\*%; 1175^c%; 1505\*%; 2464\*%; it-b\*; sy^h%; Ex-158;

MSS with 8 parents: P^46^c; P^46^1; P^46^2; C\*%; D06^c%; 81\*%; 365%; Ex-151;

MSS with 9 parents: C^1%; C^2%; 33\*; 326; sy^p%; Ex-147; Ex-153;

MSS with 10 parents: C^3%; D06\*; 6; 629; Ambst%;

MSS with 11 parents: D06^2; Ex-150;

MSS with 12 parents: it-ar;

MSS with 13 parents: F\*;

MSS with 15 parents: G012\*; G012^c;

Table 6.3: Distribution of Primary Descendants:

Number of Primary Descendants Number of Exemplars

 2 19

 3 3

 5 1

17 1

Total= 69

List of Mss with multiple primary descendants:

MSS with 2 primary descendants: Ex-144; Ex-146; Ex-147; Ex-148; Ex-151; Ex-152; Ex-153; Ex-154; Ex-155#; Ex-156; Ex-157; Ex-159; Ex-160; Ex-161; Ex-162; Ex-163; Ex-164; Ex-165#; Ex-166#;

MSS with 3 primary descendants: Ex-150; Ex-158; Autograph;

MSS with 5 primary descendants: Ex-145;

MSS with 17 primary descendants: Ex-149;

Table 6.4: Distribution of Secondary Descendants:

Number of Secondary Descendants Number of Exemplars

 0 5

 1 1

 2 2

 3 1

 4 1

 5 2

 6 1

 8 2

10 3

14 1

17 1

23 1

29 3

33 1

48 1

51 1

93 1

Total= 440

List of Mss with multiple secondary descendants:

MSS with 0 secondary descendants: Ex-145; Ex-146; Ex-147; Ex-149; Autograph;

MSS with 1 secondary descendants: Ex-150;

MSS with 2 secondary descendants: Ex-148; Ex-156;

MSS with 3 secondary descendants: Ex-159;

MSS with 4 secondary descendants: Ex-144;

MSS with 5 secondary descendants: Ex-160; Ex-162;

MSS with 6 secondary descendants: Ex-172$;

MSS with 8 secondary descendants: Ex-153; Ex-171$;

MSS with 10 secondary descendants: Ex-151; Ex-154; Ex-163;

MSS with 14 secondary descendants: Ex-161;

MSS with 17 secondary descendants: Ex-152;

MSS with 23 secondary descendants: Ex-157;

MSS with 29 secondary descendants: Ex-158; Ex-165#; Ex-170$;

MSS with 33 secondary descendants: Ex-164;

MSS with 48 secondary descendants: Ex-166#;

MSS with 51 secondary descendants: Ex-155#;

MSS with 93 secondary descendants: Ex-169$;

Number of variants introduced 0 times = 3: 2:15,1.3; 2:15,1.4; 11:24,4.3;

Number of variants introduced 1 times = 1053: 1:1,1.1; 1:1,1.2; 1:1,2.1; 1:1,2.2; 1:2,1.1; 1:2,1.2; 1:2,2.1; 1:2,2.2; 1:4,1.1; 1:4,1.2; 1:4,1.3; 1:6,1.1; 1:6,1.2; 1:8,1.1; 1:8,1.2; 1:8,1.3; 1:8,2.1; 1:8,2.2; 1:8,3.1; 1:8,3.2; 1:9,1.1; 1:9,1.2; 1:10,1.1; 1:10,1.2; 1:11,1.1; 1:11,1.2; 1:13,1.1; 1:13,1.2; 1:13,2.1; 1:13,2.2; 1:13,3.1; 1:13,3.2; 1:14,1.1; 1:14,1.2; 1:14,1.3; 1:15,1.1; 1:15,1.2; 1:15,1.3; 1:16,1.1; 1:16,1.2; 1:17,1.1; 1:17,1.2; 1:17,2.1; 1:17,2.2; 1:17,3.1; 1:17,3.2; 1:18,1.1; 1:18,1.2; 1:18,2.1; 1:18,2.2; 1:18,3.1; 1:18,3.2; 1:20,1.1; 1:20,1.2; 1:22,1.1; 1:22,1.2; 1:23,1.1; 1:23,1.2; 1:24,1.1; 1:24,1.2; 1:26,1.1; 1:26,1.2; 1:28,1.1; 1:28,1.2; 1:29,1.1; 1:29,1.2; 1:30,1.1; 1:30,1.2; 2:1,1.1; 2:1,1.2; 2:2,1.1; 2:2,1.2; 2:2,1.3; 2:2,1.4; 2:4,1.1; 2:4,1.2; 2:4,1.3; 2:4,1.4; 2:4,1.5; 2:4,2.1; 2:4,2.2; 2:8,1.1; 2:8,1.2; 2:8,2.1; 2:8,2.2; 2:9,1.1; 2:9,1.2; 2:10,1.1; 2:10,1.2; 2:10,2.1; 2:10,2.2; 2:11,1.1; 2:11,1.2; 2:11,2.1; 2:11,2.2; 2:11,2.3; 2:12,1.1; 2:12,1.2; 2:12,2.1; 2:12,2.2; 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Uniqueness index = 1.003

Variants Introduced only in the Autograph:

1:1,1.1; 1:1,2.1; 1:2,1.1; 1:2,2.1; 1:4,1.1; 1:6,1.1; 1:8,1.1; 1:8,2.1; 1:8,3.1; 1:9,1.1; 1:10,1.1; 1:11,1.1; 1:13,1.1; 1:13,2.1; 1:13,3.1; 1:14,1.1; 1:15,1.1; 1:16,1.1; 1:17,1.1; 1:17,2.1; 1:17,3.1; 1:18,1.1; 1:18,2.1; 1:18,3.1; 1:20,1.1; 1:22,1.1; 1:23,1.1; 1:24,1.1; 1:26,1.1; 1:28,1.2; 1:29,1.2; 1:30,1.1; 2:1,1.1; 2:2,1.2; 2:4,1.1; 2:4,2.1; 2:8,1.1; 2:8,2.1; 2:9,1.1; 2:10,1.1; 2:10,2.2; 2:11,1.1; 2:11,2.1; 2:12,1.1; 2:12,2.1; 2:13,1.1; 2:13,2.1; 2:14,1.1; 2:15,1.1; 2:16,1.1; 3:1,1.1; 3:2,1.1; 3:3,1.1; 3:3,2.1; 3:3,3.1; 3:4,1.1; 3:4,2.1; 3:5,1.1; 3:5,2.1; 3:5,3.1; 3:5,4.1; 3:10,1.1; 3:10,2.1; 3:12,1.2; 3:12,2.1; 3:13,1.1; 3:13,2.2; 3:14,1.1; 3:16,1.1; 3:17,1.1; 3:17,2.1; 3:18,1.1; 3:20,1.1; 4:2,1.1; 4:2,2.1; 4:5,1.1; 4:6,1.1; 4:6,2.1; 4:9,1.1; 4:10,1.1; 4:11,1.1; 4:13,1.1; 4:13,2.1; 4:14,1.2; 4:15,1.1; 4:15,2.1; 4:16,1.1; 4:17,1.1; 4:17,2.1; 5:1,1.1; 5:2,1.1; 5:2,2.1; 5:3,1.1; 5:4,1.1; 5:4,2.1; 5:5,1.1; 5:6,1.1; 5:6,2.1; 5:7,1.1; 5:7,2.1; 5:8,1.1; 5:8,2.1; 5:9,1.1; 5:10,1.1; 5:10,2.2; 5:10,3.1; 5:11,1.1; 5:11,2.1; 5:12,1.1; 5:12,2.1; 5:13,1.1; 5:13,2.1; 6:1,1.1; 6:2,1.1; 6:2,2.1; 6:5,1.1; 6:5,2.1; 6:5,3.1; 6:5,4.1; 6:7,1.1; 6:7,2.1; 6:8,1.1; 6:10,1.1; 6:10,2.1; 6:11,1.1; 6:14,1.1; 6:15,1.1; 6:15,2.1; 6:15,3.1; 6:16,1.1; 6:19,1.1; 6:19,2.1; 6:20,1.1; 6:20,2.1; 7:1,1.1; 7:2,1.1; 7:2,2.1; 7:3,1.1; 7:5,1.1; 7:5,2.1; 7:5,3.1; 7:5,4.1; 7:7,1.1; 7:7,2.1; 7:7,3.1; 7:9,1.1; 7:10,1.1; 7:13,1.1; 7:13,2.1; 7:13,3.1; 7:13,4.1; 7:14,1.1; 7:14,2.1; 7:15,1.2; 7:17,1.1; 7:17,2.1; 7:17,3.1; 7:17,4.1; 7:17,5.1; 7:18,1.1; 7:20,1.1; 7:21,1.1; 7:22,1.1; 7:24,1.1; 7:28,1.1; 7:28,2.1; 7:29,1.1; 7:29,2.1; 7:31,1.1; 7:31,2.1; 7:32,1.1; 7:34,1.1; 7:34,2.4; 7:34,3.1; 7:34,4.1; 7:35,1.1; 7:35,2.1; 7:35,3.1; 7:36,1.1; 7:37,1.1; 7:37,2.1; 7:38,1.1; 7:38,2.1; 7:38,3.1; 7:38,4.1; 7:39,1.1; 7:39,2.1; 7:39,3.1; 7:40,1.1; 7:40,2.1; 7:40,3.1; 7:40,4.1; 8:1,1.1; 8:2,1.1; 8:2,2.1; 8:2,3.1; 8:2,4.1; 8:3,1.1; 8:3,2.1; 8:4,1.1; 8:6,1.1; 8:6,2.1; 8:6,3.1; 8:7,1.2; 8:7,2.1; 8:8,1.1; 8:8,2.2; 8:8,3.2; 8:10,1.1; 8:11,1.3; 8:11,2.1; 8:12,1.1; 8:13,1.1; 8:13,2.1; 9:1,1.1; 9:2,1.1; 9:5,1.1; 9:7,1.2; 9:7,2.1; 9:8,1.1; 9:9,1.1; 9:9,2.2; 9:10,1.1; 9:12,1.1; 9:13,1.1; 9:13,2.1; 9:15,1.4; 9:16,1.1; 9:16,2.2; 9:17,1.1; 9:18,1.1; 9:18,2.1; 9:20,1.1; 9:20,2.1; 9:21,1.1; 9:21,2.1; 9:21,3.1; 9:21,4.1; 9:22,1.1; 9:22,2.1; 9:23,1.1; 9:25,1.1; 10:2,1.1; 10:3,1.1; 10:4,1.1; 10:4,2.1; 10:5,1.1; 10:8,1.1; 10:8,2.1; 10:9,1.1; 10:9,2.1; 10:9,3.1; 10:10,1.1; 10:10,2.1; 10:11,1.3; 10:11,2.1; 10:13,1.1; 10:13,2.1; 10:13,3.1; 10:13,4.1; 10:16,1.1; 10:16,2.2; 10:17,1.1; 10:18,1.2; 10:19,1.1; 10:19,2.1; 10:19,3.1; 10:20,1.2; 10:20,2.1; 10:20,3.1; 10:23,1.1; 10:23,2.1; 10:24,1.1; 10:27,1.1; 10:27,2.1; 10:28,1.1; 10:28,2.1; 10:28,3.1; 10:29,1.1; 10:31,1.1; 10:33,1.2; 11:2,1.1; 11:2,2.1; 11:3,1.1; 11:5,1.1; 11:9,1.1; 11:10,1.1; 11:14,1.1; 11:15,1.1; 11:17,1.2; 11:17,2.2; 11:19,1.1; 11:19,2.2; 11:19,3.1; 11:20,1.1; 11:22,1.1; 11:22,2.1; 11:23,1.1; 11:23,2.1; 11:23,3.1; 11:24,1.1; 11:24,2.1; 11:24,3.1; 11:24,4.1; 11:25,1.1; 11:26,1.1; 11:27,1.1; 11:27,2.1; 11:29,1.2; 11:29,2.2; 11:31,1.1; 11:32,1.1; 11:34,1.1; 12:2,1.1; 12:2,2.1; 12:2,3.1; 12:3,1.1; 12:3,2.1; 12:3,3.1; 12:6,1.1; 12:6,2.1; 12:9,1.1; 12:9,2.1; 12:9,3.1; 12:10,1.1; 12:10,2.1; 12:10,3.1; 12:10,4.1; 12:10,5.1; 12:10,6.1; 12:11,1.1; 12:12,1.1; 12:13,1.1; 12:13,2.1; 12:18,1.1; 12:19,1.1; 12:20,1.1; 12:21,1.1; 12:24,1.1; 12:24,2.1; 12:25,1.1; 12:26,1.1; 12:26,2.1; 12:27,1.1; 12:31,1.1; 12:31,2.1; 13:2,1.1; 13:3,1.1; 13:4,1.1; 13:5,1.1; 13:5,2.1; 13:8,1.2; 13:8,2.1; 13:8,3.1; 13:10,1.1; 13:11,1.1; 13:12,1.1; 13:13,1.1; 14:2,1.1; 14:2,2.1; 14:4,1.1; 14:5,1.1; 14:6,1.1; 14:7,1.1; 14:8,1.1; 14:10,1.1; 14:11,1.1; 14:12,1.1; 14:12,2.1; 14:13,1.1; 14:14,1.1; 14:15,1.1; 14:15,2.1; 14:15,3.1; 14:16,1.1; 14:16,2.1; 14:18,1.1; 14:18,2.2; 14:18,3.1; 14:19,1.1; 14:21,1.1; 14:21,2.1; 14:23,1.1; 14:25,1.1; 14:25,2.1; 14:25,3.1; 14:26,1.2; 14:28,1.1; 14:31,1.1; 14:32,1.1; 14:33,1.1; 14:34,1.1; 14:34,2.1; 14:34,3.1; 14:34,4.1; 14:34,5.1; 14:34,6.1; 14:34,7.1; 14:37,1.1; 14:38,1.1; 14:39,1.2; 14:39,2.1; 14:39,3.2; 14:40,1.1; 15:2,1.1; 15:3,1.1; 15:5,1.1; 15:5,2.1; 15:6,1.1; 15:7,1.1; 15:10,1.1; 15:10,2.1; 15:12,1.1; 15:14,1.2; 15:14,2.1; 15:15,1.1; 15:17,1.1; 15:20,1.1; 15:24,1.1; 15:25,1.1; 15:27,1.1; 15:28,1.1; 15:28,2.1; 15:28,3.1; 15:29,1.1; 15:31,1.1; 15:31,2.1; 15:31,3.1; 15:34,1.1; 15:37,1.1; 15:45,1.1; 15:45,2.1; 15:47,1.1; 15:47,2.1; 15:49,1.2; 15:50,1.1; 15:50,2.2; 15:51,1.1; 15:51,2.2; 15:51,3.1; 15:52,1.1; 15:52,2.1; 15:54,1.1; 15:54,2.1; 15:54,3.1; 15:54,4.1; 16:2,1.1; 16:2,2.1; 16:3,1.1; 16:4,1.1; 16:6,1.1; 16:6,2.1; 16:6,3.1; 16:7,1.1; 16:8,1.1; 16:10,1.1; 16:12,1.1; 16:15,1.1; 16:15,2.1; 16:17,1.2; 16:17,2.1; 16:19,1.1; 16:19,2.1; 16:19,3.1; 16:19,4.1; 16:19,5.1; 16:22,1.1; 16:23,1.2; 16:24,1.2;

Total = 469

Total = 0

Appendix F: Variants Introduced only once in a witness not the autograph, arranged by variant:

1.2 1:1,1.2 Ex-168$; ê omit

2.2 1:1,2.2 Ex-155#; 2 1

3.2 1:2,1.2 Ex-168$; 5&8 1&4

4.2 1:2,2.2 Ex-172$; te

5.2 1:4,1.2 Ex-168$; † ð

5.3 1:4,1.3 491; hmwn

6.2 1:6,1.2 Ex-168$; qeou

7.2 1:8,1.2 Ex-168$; acri t)

7.3 1:8,1.3 Ex-169$; teleiouj

8.2 1:8,2.2 Ex-168$; parousia

9.2 1:8,3.2 Ex-164; ê omit

10.2 1:9,1.2 Ex-168$; uf

11.2 1:10,1.2 Ex-168$; ðma

12.2 1:11,1.2 Ex-169$; ê omit

13.2 1:13,1.2 Ex-168$; mh

14.2 1:13,2.2 Ex-168$; h'

15.2 1:13,3.2 Ex-168$; peri

16.2 1:14,1.2 Ex-165#; †ð

16.3 1:14,1.3 Ex-169$; t) q) mou

17.2 1:15,1.2 Ex-168$; ðtisa

17.3 1:15,1.3 104\*%; ðtisqh

18.2 1:16,1.2 Ex-160; ê omit

19.2 1:17,1.2 Ex-168$; o

20.2 1:17,2.2 Ex-168$; ðisasqai

21.2 1:17,3.2 Ex-168$; logwn

22.2 1:18,1.2 Ex-168$; ê omit

23.2 1:18,2.2 Ex-169$; ê omit

24.2 1:18,3.2 Ex-169$; ê omit

25.2 1:20,1.2 Ex-172$; toutou

26.2 1:22,1.2 Ex-168$; ê omit

27.2 1:23,1.2 Ex-168$; Ellhsi

28.2 1:24,1.2 Ex-168$; ðstoj q) ðmij k) q) ðia

29.2 1:26,1.2 Ex-168$; oun

30.1 1:28,1.1 Ex-172$; Þ omit

31.1 1:29,1.1 Ex-172$; ätou qeou

32.2 1:30,1.2 Ex-168$; kai d)

33.2 2:1,1.2 Ex-172$; † marturion

34.1 2:2,1.1 Ex-168$; äti eivdenai

34.3 2:2,1.3 Ex-169$; tou eid)ti

34.4 2:2,1.4 044\*; idein ti

35.2 2:4,1.2 Ex-172$; peiqoij anqrwpinhj sof) l)

35.3 2:4,1.3 Ex-145; peiqoi anq) sof) l)

35.4 2:4,1.4 131\*; peiqoij anq) sof) kai l)

35.5 2:4,1.5 Ex-170$; peiqoij sof)

36.2 2:4,2.2 Ex-168$; apokaluyei

37.2 2:8,1.2 Ex-168$; egnw

38.2 2:8,2.2 Ex-168$; autwn

39.2 2:9,1.2 Ex-168$; † osa

40.2 2:10,1.2 Ex-168$; † gar

41.1 2:10,2.1 Ex-165#; Þ omit

42.2 2:11,1.2 Ex-168$; ê omit

43.2 2:11,2.2 Ex-156; 1 2

43.3 2:11,2.3 1505\*%; ð

44.2 2:12,1.2 Ex-168$; toutou

45.2 2:12,2.2 Ex-168$; idwmen

46.2 2:13,1.2 Ex-169$; agiou

47.2 2:13,2.2 Ex-168$; ðkwj

48.2 2:14,1.2 Ex-168$; è omit

49.2 2:15,1.2 Ex-172$; † men panta

49.5 2:15,1.5 Ex-169$; men ta panta

50.2 2:16,1.2 Ex-172$; kuriou

51.2 3:1,1.2 Ex-168$; ðikoij

52.2 3:2,1.2 Ex-164; ê omit

53.2 3:3,1.2 Ex-168$; ðinoi

54.2 3:3,2.2 Ex-169$; kai dicostasiai

55.2 3:3,3.2 Ex-168$; ðinoi

56.2 3:4,1.2 Ex-168$; ouci anq)

56.3 3:4,1.3 Ex-155#; ouci sarkikoi

57.2 3:4,2.2 Ex-168$; kai kata anqrwpon peripateite

58.2 3:5,1.2 Ex-172$; tij

59.2 3:5,2.2 Ex-172$; tij

60.2 3:5,3.2 Ex-169$; Paul) ëëë Ap)

61.2 3:5,4.2 Ex-168$; all h

62.2 3:10,1.2 Ex-168$; è omit

63.2 3:10,2.2 Ex-155#; teqeika

64.1 3:12,1.1 Ex-165#; Þ omit

65.2 3:12,2.2 Ex-169$; † ðsionÃ ðrion

65.3 3:12,2.3 Ex-170$; ðson kai ðron

65.4 3:12,2.4 Ex-171$; ðsion kai ðrion

66.2 3:13,1.2 Ex-156; o poihsaj touto to er) faneroj genhtai

67.1 3:13,2.1 Ex-165#; ê auto

68.2 3:14,1.2 Ex-168$; me,nei

69.2 3:16,1.2 Ex-168$; 2 1

70.2 3:17,1.2 Ex-168$; fqeirei

71.2 3:17,2.2 Ex-168$; auton

72.2 3:18,1.2 Ex-168$; kenoij logoij

73.2 3:20,1.2 Ex-168$; anqrwpwn

74.2 4:2,1.2 Ex-169$; o] de

75.2 4:2,2.2 Ex-165#; ðte

76.2 4:5,1.2 Ex-168$; ê omit

77.2 4:6,1.2 Ex-166#; o

78.2 4:6,2.2 Ex-155#; fronein

79.2 4:9,1.2 Ex-172$; oti

80.2 4:10,1.2 P^11%; kuriw

81.2 4:11,1.2 Ex-169$; gumnhtð

82.2 4:13,1.2 Ex-172$; blasfð

83.2 4:13,2.2 Ex-168$; wsperi kaq)

84.1 4:14,1.1 Ex-168$; Ýnouqetwn

85.2 4:15,1.2 Ex-168$; ê omit

86.2 4:15,2.2 Ex-168$; ê omit

87.2 4:16,1.2 Ex-168$; kaqwj kagw Cristou

88.2 4:17,1.2 Ex-161; † auto

89.2 4:17,2.2 Ex-169$; 1

89.3 4:17,2.3 Ex-170$; kuriw Ihs)

90.2 5:1,1.2 Ex-155#; onomazetai

91.2 5:2,1.2 Ex-152; exarqh

92.2 5:2,2.2 Ex-168$; poihsaj

93.2 5:3,1.2 Ex-169$; wj

94.2 5:4,1.2 Ex-168$; † 2

94.3 5:4,1.3 Ex-169$; hm) Ihs) Cristou

94.4 5:4,1.4 Ex-170$; Ihs) Cr)

95.2 5:4,2.2 Ex-168$; 2

95.3 5:4,2.3 Ex-153; ð

96.2 5:5,1.2 Ex-172$; Ihsou

96.3 5:5,1.3 Ex-166#; Ihs) Cristou

96.4 5:5,1.4 Ex-168$; hmwn Ihs) Cr)

97.2 5:6,1.2 Ex-168$; ê omit

98.2 5:6,2.2 D06\*; doloi

98.3 5:6,2.3 Irlat^a%; corrumpit

99.2 5:7,1.2 Ex-172$; oun

100.2 5:7,2.2 Ex-155#; uper hmwn

101.2 5:8,1.2 Ex-158; Ã mh

101.3 5:8,1.3 Ex-150; h;

102.2 5:8,2.2 Ex-168$; porneiaj

103.2 5:9,1.2 D06^1; ðsqe

104.2 5:10,1.2 Ex-155#; kai

105.1 5:10,2.1 Ex-172$; Ýkai

106.2 5:10,3.2 Ex-169$; ofð

107.2 5:11,1.2 Ex-169$; nuni

108.2 5:11,2.2 Ex-172$; h;

109.2 5:12,1.2 Ex-169$; kai

110.2 5:12,2.2 Ex-168$; touj eswqen um) krinate

111.2 5:13,1.2 Ex-168$; kri,nei

112.2 5:13,2.2 Ex-168$; exairete

112.3 5:13,2.3 Ex-151; kai exareite

113.2 6:1,1.2 Ex-168$; ex

114.2 6:2,1.2 Ex-169$; ê omit

115.2 6:2,2.2 Ex-172$; kri,nousin

116.2 6:5,1.2 Ex-158; lalw

117.2 6:5,2.2 Ex-168$; estin

118.2 6:5,3.2 Ex-168$; 2

118.3 6:5,3.3 Ex-151; sof) oude eij

119.2 6:5,4.2 Ex-168$; kai tou adelfou

120.2 6:7,1.2 Ex-169$; ê omit

121.2 6:7,2.2 Ex-168$; krima

122.2 6:8,1.2 Ex-151; tauta

123.2 6:10,1.2 Ex-166#; oute

124.2 6:10,2.2 Ex-169$; ou

125.2 6:11,1.2 Ex-169$; 1

125.3 6:11,1.3 Ex-166#; hmwn Ihs) Cr)

126.2 6:14,1.2 Ex-166#; exhgeiren

126.3 6:14,1.3 Ex-169$; exegeirei

127.2 6:15,1.2 Ex-172$; h

128.2 6:15,2.2 Ex-161; hmð

129.2 6:15,3.2 Ex-168$; ara

129.3 6:15,3.3 Ex-169$; h' ara

130.2 6:16,1.2 Ex-168$; ê omit

131.2 6:19,1.2 Ex-168$; ta swmata

132.2 6:19,2.2 Ex-168$; 2 1

133.2 6:20,1.2 Ex-168$; arate

133.3 6:20,1.3 Ex-169$; ð

134.2 6:20,2.2 Ex-169$; kai en tw pneumati umwnÃ atina estin tou qeou

135.2 7:1,1.2 Ex-166#; moi

136.2 7:2,1.2 Ex-166#; thn ðan

137.2 7:2,2.2 Ex-168$; è omit

138.2 7:3,1.2 Ex-151; ofeilomenhn eunoian

139.2 7:5,1.2 Ex-168$; ê omit

140.2 7:5,2.2 Ex-155#; nhsteia kai th

141.2 7:5,3.2 Ex-172$; sunerchsqe

142.2 7:5,4.2 Ex-158; ê omit

143.2 7:7,1.2 Ex-172$; gar

144.2 7:7,2.2 Ex-172$; oj

145.2 7:7,3.2 Ex-172$; oj

146.2 7:9,1.2 Ex-169$; † gamein

147.2 7:10,1.2 Ex-168$; ðizesqai

147.3 7:10,1.3 Ex-169$; ðizesqw

148.2 7:13,1.2 Ex-172$; † htij

149.2 7:13,2.2 Ex-152; autoj

150.2 7:13,3.2 Ex-168$; eudð

151.2 7:13,4.2 Ex-172$; auton

152.2 7:14,1.2 Ex-166#; th pisth

153.2 7:14,2.2 Ex-155#; andri

153.3 7:14,2.3 Ex-166#; an) tw pistw

154.1 7:15,1.1 Ex-168$; Ýumaj

155.2 7:17,1.2 Ex-168$; h'

156.2 7:17,2.2 Ex-165#; † memeriken

157.2 7:17,3.2 Ex-151; qeoj

157.3 7:17,3.3 Ex-169$; qeoj

158.2 7:17,4.2 Ex-151; kurioj

158.3 7:17,4.3 Ex-169$; qeoj

159.2 7:17,5.2 Ex-166#; didaskw

160.2 7:18,1.2 Ex-168$; 2 1

160.3 7:18,1.3 Ex-151; tij eklhqh

161.2 7:20,1.2 Ex-168$; en

162.2 7:21,1.2 Ex-168$; ê omit

163.2 7:22,1.2 Ex-166#; kai

163.3 7:22,1.3 Ex-169$; de kai

164.2 7:24,1.2 309; è omit

165.2 7:28,1.2 Ex-168$; labhj gunaika

166.2 7:28,2.2 Ex-168$; ê omit

167.2 7:29,1.2 Ex-168$; oti

168.2 7:29,2.2 Ex-168$; ê omit

169.2 7:31,1.2 Ex-168$; t) k) touton

169.3 7:31,1.3 Ex-155#; tw ðmw toutw

170.2 7:31,2.2 L019\*%; paracrð

170.3 7:31,2.3 Ex-166#; crð

171.2 7:32,1.2 Ex-166#; qew

172.2 7:34,1.2 Ex-169$; 2 3

172.3 7:34,1.3 sy^p%; mem) de

172.4 7:34,1.4 Ex-172$; 1 2

173.1 7:34,2.1 Ex-172$; æh agamoj kai h parqenoj

173.2 7:34,2.2 it-f\*; 3&5

173.3 7:34,2.3 Ex-168$; 3&5 1 2

174.2 7:34,3.2 Ex-168$; ê omit

175.2 7:34,4.2 Ex-168$; è omit

176.2 7:35,1.2 Ex-172$; ê omit

177.2 7:35,2.2 Ex-155#; ðferon

178.2 7:35,3.2 P^15%; ðstouj einai

179.2 7:36,1.2 Ex-168$; ðeitw

180.2 7:37,1.2 Ex-155#; 5 1&3

180.3 7:37,1.3 Ex-169$; 1&4

181.2 7:37,2.2 P^15%; ê omit

182.2 7:38,1.2 Ex-155#; ekgð

183.2 7:38,2.2 Ex-168$; t) p) aut)

183.3 7:38,2.3 Ex-152; ð

184.2 7:38,3.2 Ex-168$; poihsei

185.2 7:38,4.2 Ex-155#; ekgð

186.2 7:39,1.2 Ex-155#; nomw

186.3 7:39,1.3 Ex-168$; gamw

187.2 7:39,2.2 Ex-169$; kai

188.2 7:39,3.2 Ex-168$; apoqanh

189.2 7:40,1.2 Ex-168$; makaria

190.2 7:40,2.2 Ex-168$; gar

191.2 7:40,3.2 Ex-168$; Cristou

192.2 7:40,4.2 Ex-169$; ecw

193.2 8:1,1.2 Ex-168$; de

194.2 8:2,1.2 Ex-151; de

195.2 8:2,2.2 Ex-172$; eidenai

195.3 8:2,2.3 326; einai

196.2 8:2,3.2 Ex-168$; ê omit

197.2 8:2,4.2 044\*; oudepw

197.3 8:2,4.3 Ex-151; oudepw ouden

198.2 8:3,1.2 Ex-168$; è omit

199.2 8:3,2.2 Ex-169$; è omit

200.2 8:4,1.2 Ex-155#; eteroj

201.2 8:6,1.2 Ex-168$; ê omit

202.2 8:6,2.2 Ex-158; on

203.2 8:6,3.2 Ex-168$; Ã kai e] n pneuma agionÃ en w ta panta kai hmeij en autw

204.1 8:7,1.1 Ex-165#; Ýsunhqeia

205.2 8:7,2.2 Ex-168$; asqenousa

206.2 8:8,1.2 Ex-169$; umð

207.1 8:8,2.1 Ex-165#; àparasthsei

208.1 8:8,3.1 Ex-168$; äoute evan mh fagwmen usteroumeqa oute evan fagwmen perisseuomen

208.3 8:8,3.3 A\*; 1&4 9 6&8 5

209.2 8:10,1.2 Ex-166#; ê omit

210.1 8:11,1.1 Ex-165#; äavpollutai gar

210.2 8:11,1.2 Ex-168$; ap) oun

210.4 8:11,1.4 Ex-172$; kai apoleitai

211.2 8:11,2.2 Ex-168$; ad) en t) s) gn)

211.3 8:11,2.3 Ex-169$; ad) epi t) s) gn)

212.2 8:12,1.2 Ex-168$; ê omit

213.2 8:13,1.2 Ex-168$; ê omit

214.2 8:13,2.2 Ex-168$; ê omit

215.2 9:1,1.2 Ex-169$; 4 2 3 1

216.2 9:2,1.2 Ex-168$; thj emhj

217.2 9:5,1.2 Ex-168$; gunaikaj

218.1 9:7,1.1 Ex-165#; äton karpon

219.2 9:7,2.2 Ex-166#; ê omit

220.2 9:8,1.2 Ex-168$; legw

220.3 9:8,1.3 Ex-166#; t) legw

221.2 9:9,1.2 Ex-168$; 1&3 5 6

221.3 9:9,1.3 Ex-169$; gegr) gar

222.1 9:9,2.1 Ex-168$; Ýkhmwseij

223.2 9:10,1.2 Ex-172$; thj elpidoj autou met) ep elp)

224.2 9:12,1.2 Ex-172$; ekkð

225.2 9:13,1.2 Ex-169$; ê omit

226.2 9:13,2.2 Ex-155#; prosedð

227.1 9:15,1.1 Ex-165#; æouvdeij kenwsei

227.2 9:15,1.2 Ex-168$; ouqeij mh kainwsei

227.3 9:15,1.3 Ex-169$; tij kenð

228.2 9:16,1.2 Ex-168$; carij

229.1 9:16,2.1 Ex-166#; àeuvaggeliswmai

229.3 9:16,2.3 Ex-168$; ðzomai

230.2 9:17,1.2 1505\*%; ouk

231.2 9:18,1.2 Ex-172$; moi es)

231.3 9:18,1.3 Ex-170$; estai moi

232.2 9:18,2.2 Ex-168$; tou Cristou

233.2 9:20,1.2 Ex-169$; ê omit

234.2 9:20,2.2 Ex-168$; è omit

235.2 9:21,1.2 Ex-152; qew

236.2 9:21,2.2 Ex-152; stw

237.2 9:21,3.2 Ex-172$; kerdhsw

238.2 9:21,4.2 Ex-155#; ê omit

239.2 9:22,1.2 Ex-155#; wj

240.2 9:22,2.2 Ex-166#; pantaj

241.2 9:23,1.2 Ex-152; touto

242.2 9:25,1.2 Ex-168$; ê omit

243.2 10:2,1.2 Ex-169$; † ðisanto

243.3 10:2,1.3 P^46\*; ðizonto

244.2 10:3,1.2 Ex-168$; to

244.3 10:3,1.3 01\*; ð

245.2 10:4,1.2 Ex-168$; ê omit

246.2 10:4,2.2 Ex-168$; 2 1

247.2 10:5,1.2 81\*%; è omit

248.2 10:8,1.2 Ex-155#; en

249.2 10:8,2.2 Ex-168$; tessarej

250.2 10:9,1.2 Ex-172$; † kurion

250.3 10:9,1.3 Ex-169$; qeon

251.2 10:9,2.2 Ex-168$; exepð

252.2 10:9,3.2 Ex-168$; apwlonto

253.2 10:10,1.2 Ex-169$; ðzwmen

254.2 10:10,2.2 Ex-169$; kaqwj

254.3 10:10,2.3 Ex-151; kaqwj kai

255.1 10:11,1.1 Ex-172$; ätauta de

255.2 10:11,1.2 Ex-168$; panta de tauta

256.2 10:11,2.2 Ex-168$; tupoi ðnon

257.2 10:13,1.2 Ex-166#; ou katalabh

258.2 10:13,2.2 Ex-168$; afhsei

259.2 10:13,3.2 Ex-168$; 2 1

260.2 10:13,4.2 Ex-155#; umaj

261.2 10:16,1.2 Ex-172$; eucaristiaj

262.1 10:16,2.1 Ex-165#; âevstin tou aimatoj tou Cristouß

263.2 10:17,1.2 Ex-166#; kai tou enoj pothriou

264.1 10:18,1.1 Ex-168$; Ýouvc

265.2 10:19,1.2 Ex-166#; 2 1

266.2 10:19,2.2 Ex-172$; è omit

267.2 10:19,3.2 Ex-166#; 2 1

268.1 10:20,1.1 Ex-168$; Ýquousin

269.2 10:20,2.2 Ex-172$; 4 1&3

270.2 10:20,3.2 Ex-168$; daim) koin)

270.3 10:20,3.3 Ex-169$; kan) daim)

271.2 10:23,1.2 Ex-155#; moi

272.2 10:23,2.2 Ex-155#; moi

273.2 10:24,1.2 Ex-152; ekastoj

274.2 10:27,1.2 Ex-166#; eij deipnon

275.2 10:27,2.2 Ex-157; panta ta ðmena

276.2 10:28,1.2 Ex-166#; eidwloqð

277.2 10:28,2.2 Ex-168$; è omit

278.2 10:28,3.2 Ex-169$; tou gar kuriou h gh kai to plhrwma authj

279.2 10:29,1.2 Ex-168$; apistou

280.2 10:31,1.2 Ex-168$; ê omit

281.1 10:33,1.1 Ex-165#; Ýsumforon

282.2 11:2,1.2 Ex-166#; adelfoi

283.2 11:2,2.2 Ex-160; pantacou

284.2 11:3,1.2 Ex-144; ê omit

285.2 11:5,1.2 Ex-169$; eauð

286.2 11:9,1.2 Ex-168$; anqrwpon

287.2 11:10,1.2 Ex-168$; kalumma

288.2 11:14,1.2 Ex-169$; h;

289.2 11:15,1.2 Ex-169$; ê omit

289.3 11:15,1.3 Ex-172$; pon) a) ded)

290.1 11:17,1.1 Ex-172$; Ýparaggellwn

290.3 11:17,1.3 Ex-164; ðllwn

290.4 11:17,1.4 Ex-169$; ðllw

291.1 11:17,2.1 Ex-172$; àevpainw

291.3 11:17,2.3 Ex-164; ðnwn

291.4 11:17,2.4 Ex-169$; nw

292.2 11:19,1.2 Ex-166#; è omit

293.1 11:19,2.1 Ex-168$; êkai

294.2 11:19,3.2 Ex-168$; è omit

295.2 11:20,1.2 33\*; de

295.3 11:20,1.3 Ex-168$; ð

296.2 11:22,1.2 Ex-166#; epainw

297.2 11:22,2.2 Ex-168$; ê omit

298.2 11:23,1.2 Ex-166#; para kur)

298.3 11:23,1.3 Ex-168$; apo qeou

299.2 11:23,2.2 Ex-158; ê omit

300.2 11:23,3.2 Ex-168$; ton

301.2 11:24,1.2 Ex-169$; labete fagete

302.2 11:24,2.2 Ex-172$; 2 1

303.2 11:24,3.2 Ex-168$; ê omit

304.2 11:24,4.2 Ex-155#; klwmenon

304.4 11:24,4.4 Ex-169$; didomenon

305.2 11:25,1.2 Ex-168$; aim) mou

306.2 11:26,1.2 Ex-172$; touto

307.2 11:27,1.2 Ex-169$; touton

308.2 11:27,2.2 Ex-168$; tou kuriou

309.1 11:29,1.1 Ex-165#; Þ omit

310.1 11:29,2.1 Ex-165#; ß omit

311.2 11:31,1.2 Ex-155#; gar

312.2 11:32,1.2 Ex-168$; ê omit

313.2 11:34,1.2 Ex-172$; de

314.2 12:2,1.2 Ex-168$; 2

314.3 12:2,1.3 Ex-169$; 1

315.2 12:2,2.2 Ex-156; amorfa

316.2 12:2,3.2 Ex-169$; wj anhgesqe

316.3 12:2,3.3 Ex-166#; wsan hg)

317.2 12:3,1.2 Ex-168$; ê omit

318.2 12:3,2.2 Ex-169$; A) ðsoun

318.3 12:3,2.3 Ex-166#; A) ðsou

319.2 12:3,3.2 Ex-168$; ðion ðsoun

320.2 12:6,1.2 Ex-168$; kai o

321.2 12:6,2.2 Ex-169$; q) o en) estin

321.3 12:6,2.3 Ex-155#; estin q) o en)

322.2 12:9,1.2 Ex-172$; de

323.2 12:9,2.2 Ex-172$; ðma

324.2 12:9,3.2 Ex-172$; autw

324.3 12:9,3.3 Ex-169$; ð

325.2 12:10,1.2 Ex-168$; energeia dunamewj

326.2 12:10,2.2 Ex-166#; ê omit

327.2 12:10,3.2 Ex-166#; ê omit

328.2 12:10,4.2 Ex-172$; ðsij

329.2 12:10,5.2 Ex-172$; de

330.2 12:10,6.2 Ex-168$; diermð

331.2 12:11,1.2 Ex-172$; ê omit

332.2 12:12,1.2 Ex-155#; tou enoj

333.2 12:13,1.2 Ex-169$; eij

334.2 12:13,2.2 Ex-168$; poma epot)

334.3 12:13,2.3 Ex-157; swma esmen

335.2 12:18,1.2 Ex-168$; † nun

336.2 12:19,1.2 Ex-168$; ê omit

337.2 12:20,1.2 Ex-169$; ê omit

338.2 12:21,1.2 Ex-166#; ê omit

339.2 12:24,1.2 Ex-168$; timhj

340.2 12:24,2.2 Ex-172$; ðrounti

341.2 12:25,1.2 Ex-155#; ðmata

342.2 12:26,1.2 Ex-166#; ei ti

343.2 12:26,2.2 Ex-165#; ê omit

344.2 12:27,1.2 Ex-168$; melouj

345.2 12:31,1.2 Ex-166#; kreiona

346.2 12:31,2.2 Ex-168$; ei ti

347.2 13:2,1.2 Ex-172$; ðnein

348.2 13:3,1.2 Ex-166#; † kauqhsomai

348.3 13:3,1.3 Ex-168$; ðqhswmai

348.4 13:3,1.4 Ex-169$; kauqh

349.2 13:4,1.2 Ex-166#; è omit

349.3 13:4,1.3 Ex-169$; pon) p) perp)

350.2 13:5,1.2 Ex-168$; euscð

351.2 13:5,2.2 P^46\*; to

351.3 13:5,2.3 Ex-169$; to mh

352.1 13:8,1.1 Ex-165#; Ýpiptei

353.2 13:8,2.2 Ex-158; ðeiaÃ ðsetai

354.2 13:8,3.2 Ex-169$; ðseijÃ ðsontai

355.2 13:10,1.2 Ex-168$; tote

356.2 13:11,1.2 Ex-155#; de

357.2 13:12,1.2 Ex-168$; wj di es)

357.3 13:12,1.3 33\*; di es) wj

357.4 13:12,1.4 Ex-169$; di es) kai

358.2 13:13,1.2 Ex-168$; 4&6 1&3

359.2 14:2,1.2 Ex-172$; tw

360.2 14:2,2.2 Ex-168$; pneuma

361.2 14:4,1.2 Ex-168$; qeou

362.2 14:5,1.2 Ex-152; ðneuei

362.3 14:5,1.3 Ex-169$; tij ðneuei )

362.4 14:5,1.4 D06\*; ðneuwn

362.5 14:5,1.5 Ex-170$; h= ? o diðneuwn

363.2 14:6,1.2 Ex-168$; ê omit

364.2 14:7,1.2 Ex-169$; fqoggou

365.2 14:8,1.2 Ex-166#; 2 1

366.2 14:10,1.2 Ex-155#; autwn

367.2 14:11,1.2 Ex-172$; ê omit

368.2 14:12,1.2 Ex-168$; ðmatikwn

369.2 14:12,2.2 Ex-168$; profhteuhte

370.2 14:13,1.2 Ex-155#; dioper

371.2 14:14,1.2 Ex-168$; ê omit

372.2 14:15,1.2 Ex-168$; ðxwmai

373.2 14:15,2.2 Ex-168$; xwmai

374.2 14:15,3.2 Ex-166#; ê omit

375.2 14:16,1.2 Ex-168$; ðghshj

376.2 14:16,2.2 Ex-169$; tw

376.3 14:16,2.3 Ex-172$; ð

377.2 14:18,1.2 Ex-168$; mou

377.3 14:18,1.3 Ex-166#; oti

377.4 14:18,1.4 Ex-169$; uper

378.1 14:18,2.1 Ex-168$; Ýglwssaij

379.2 14:18,3.2 Ex-151; lalwn

379.3 14:18,3.3 Ex-168$; lalein

379.4 14:18,3.4 Ex-157; ð

380.2 14:19,1.2 Ex-169$; en tw n) m)

380.3 14:19,1.3 Ex-172$; dia tou nooj mou

380.4 14:19,1.4 Ex-156; dia ton nomon

381.2 14:21,1.2 Ex-168$; ean

382.2 14:21,2.2 Ex-172$; ðroij

383.2 14:23,1.2 Ex-168$; elqh

384.2 14:25,1.2 Ex-168$; kai outw

385.2 14:25,2.2 Ex-168$; dianoiaj

386.2 14:25,3.2 Ex-169$; ê omit

387.1 14:26,1.1 Ex-165#; Þ omit

388.2 14:28,1.2 Ex-168$; ermð

389.2 14:31,1.2 6; ekastoi

389.3 14:31,1.3 Ex-150; ekas) pant)

389.4 14:31,1.4 Ex-168$; ð

390.2 14:32,1.2 Ex-168$; ðma

391.2 14:33,1.2 Ex-168$; q)

391.3 14:33,1.3 Ambst%; ð

392.2 14:34,1.2 Ex-168$; vss 34/35 pon) p)

393.2 14:34,2.2 Ex-168$; umwn

394.2 14:34,3.2 Ex-168$; epitetraptai

395.2 14:34,4.2 Ex-166#; ðsqai

396.2 14:34,5.2 Ex-157; toij andrasin

397.2 14:34,6.2 Ex-161; manqanein

398.2 14:34,7.2 Ex-168$; ê omit

399.2 14:37,1.2 Ex-169$; 1 3 2

399.3 14:37,1.3 Ex-156; 1 2

399.4 14:37,1.4 Ex-166#; kur) eisin entolai

399.5 14:37,1.5 Ex-170$; qeou est) ðlh

400.2 14:38,1.2 Ex-172$; ðeitw

401.1 14:39,1.1 Ex-168$; êmou

402.2 14:39,2.2 Ex-168$; ê omit

403.1 14:39,3.1 Ex-172$; ämh kwluete glwssaij

403.3 14:39,3.3 Ex-168$; en gl) mh k)

403.4 14:39,3.4 Ex-164; mh k) en gl)

404.2 14:40,1.2 Ex-168$; hic vss 34/35 add)

405.2 15:2,1.2 Ex-168$; ofeilete katecein

406.2 15:3,1.2 Ex-168$; è omit

407.2 15:5,1.2 Ex-168$; epeita

407.3 15:5,1.3 Ex-166#; kai meta tauta

408.2 15:5,2.2 Ex-166#; endð

409.2 15:6,1.2 Ex-172$; kai

410.2 15:7,1.2 Ex-165#; epeita

411.2 15:10,1.2 Ex-168$; kenh ouk eg)

411.3 15:10,1.3 Ex-169$; ptwch ouk eg)

412.2 15:10,2.2 Ex-166#; ê omit

413.2 15:12,1.2 Ex-172$; 2 3 1

414.1 15:14,1.1 Ex-168$; êkai

415.2 15:14,2.2 Ex-169$; hmð

416.2 15:15,1.2 Ex-169$; è omit

417.2 15:17,1.2 Ex-158; † estin

418.2 15:20,1.2 Ex-152; egeneto

419.2 15:24,1.2 Ex-166#; paradw

420.2 15:25,1.2 Ex-168$; autou

421.2 15:27,1.2 Ex-166#; ê omit

422.2 15:28,1.2 Ex-168$; ê omit

423.2 15:28,2.2 Ex-168$; è omit

424.2 15:28,3.2 Ex-165#; ê omit

425.2 15:29,1.2 Ex-169$; twn nekrwn

425.3 15:29,1.3 69; autwn t) nek)

426.2 15:31,1.2 Ex-168$; hmð

427.2 15:31,2.2 Ex-169$; ê omit

428.2 15:31,3.2 Ex-168$; kuriw

429.2 15:34,1.2 Ex-168$; legw

430.2 15:37,1.2 Ex-169$; gennhð

431.2 15:45,1.2 Ex-168$; ê omit

432.2 15:45,2.2 Ex-168$; ê omit

433.2 15:47,1.2 Ex-169$; o kurioj

433.3 15:47,1.3 Ex-172$; anq) o kur)

433.4 15:47,1.4 Ex-171$; anq) pneumatikoj

434.2 15:47,2.2 Ex-166#; o ouranioj

435.1 15:49,1.1 Ex-168$; Ýforesomen

436.2 15:50,1.2 Ex-172$; gar

437.1 15:50,2.1 Ex-168$; äklhronomhsai ouv dunatai

437.3 15:50,2.3 Ex-169$; ou klhronomhsousin

438.2 15:51,1.2 Ex-157; oi

439.1 15:51,2.1 Ex-168$; ß omit

440.2 15:51,3.2 Ex-169$; 2 1 3 4

440.3 15:51,3.3 Ex-170$; ou koi)Ã ou p) de

440.4 15:51,3.4 Ex-166#; anasthsomeqaÃ ou p) de

441.2 15:52,1.2 Ex-168$; roph

442.2 15:52,2.2 Ex-168$; anasthsð

443.2 15:54,1.2 Ex-172$; 7&11

443.3 15:54,1.3 Ex-169$; 7&11 6 1&5

444.2 15:54,2.2 Ex-168$; neikoj

445.2 15:54,3.2 Ex-168$; 6 2&5 1

445.3 15:54,3.3 Ex-172$; ken)\* p) s)Ã adhÃ to ni)

445.4 15:54,3.4 Ex-169$; ni)\* p) s)Ã adhÃ to ken)

446.2 15:54,4.2 Ex-168$; neikoj

447.2 16:2,1.2 Ex-155#; ðtwn

448.2 16:2,2.2 Ex-172$; ðdwqh

449.2 16:3,1.2 Ex-168$; dokimazete

450.2 16:4,1.2 Ex-168$; 2 1

451.2 16:6,1.2 Ex-168$; ê omit

452.2 16:6,2.2 Ex-168$; † katamð

453.2 16:6,3.2 Ex-168$; 1

453.3 16:6,3.3 Ex-169$; 2

454.2 16:7,1.2 Ex-169$; de

455.2 16:8,1.2 Ex-169$; ðme,nw

456.2 16:10,1.2 Ex-168$; egw

457.2 16:12,1.2 Ex-168$; dhlw umin oti

458.2 16:15,1.2 Ex-166#; kai Fortounatou

458.3 16:15,1.3 Ex-169$; k) For) kai Acai@kou

459.2 16:15,2.2 33\*; Ac) autoj

459.3 16:15,2.3 Ex-168$; Asiaj

460.1 16:17,1.1 Ex-168$; Ýumeteron

461.2 16:17,2.2 Ex-166#; autoi

462.2 16:19,1.2 Ex-157; è omit

463.2 16:19,2.2 Ex-172$; è omit

464.2 16:19,3.2 Ex-168$; ðzontai

465.2 16:19,4.2 Ex-166#; ðkilla

466.2 16:19,5.2 Ex-172$; par oij kai xenizomai

467.2 16:22,1.2 Ex-168$; maran aqa

467.3 16:22,1.3 Ex-169$; maranaqa

468.1 16:23,1.1 Ex-165#; Þ omit

469.1 16:24,1.1 Ex-168$; Þ omit

469.3 16:24,1.3 Ex-169$; geneqhtw geneqhtw

Total = 584

Non-unique Autographic readings:

Appendix G: Variants Introduced only once in a witness not the autograph, arranged by Exemplar:

P^11% 80.2 4:10,1.2 kuriw

Total for P^11% = 1

P^15% 178.2 7:35,3.2 ðstouj einai

P^15% 181.2 7:37,2.2 ê omit

Total for P^15% = 2

P^34% 452.2 16:6,2.2 † katamð

Total for P^34% = 1

P^46\* 243.3 10:2,1.3 ðizonto

P^46\* 351.2 13:5,2.2 to

Total for P^46\* = 2

P^61% 91.1 5:2,1.1 Ýavrqh

P^61% 96.2 5:5,1.2 Ihsou

Total for P^61% = 2

01\* 244.3 10:3,1.3 ð

Total for 01\* = 1

A\* 208.3 8:8,3.3 1&4 9 6&8 5

Total for A\* = 1

D06\* 98.2 5:6,2.2 doloi

D06\* 194.2 8:2,1.2 de

D06\* 197.2 8:2,4.2 oudepw

D06\* 284.2 11:3,1.2 ê omit

D06\* 304.3 11:24,4.3 qruptomenon

D06\* 362.4 14:5,1.4 ðneuwn

Total for D06\* = 6

D06^c% 194.2 8:2,1.2 de

Total for D06^c% = 1

D06^1 103.2 5:9,1.2 ðsqe

D06^1 194.2 8:2,1.2 de

Total for D06^1 = 2

F\* 49.4 2:15,1.4 panta

F\* 197.2 8:2,4.2 oudepw

F\* 284.2 11:3,1.2 ê omit

Total for F\* = 3

G012\* 49.4 2:15,1.4 panta

G012\* 197.2 8:2,4.2 oudepw

Total for G012\* = 2

G012^c 49.4 2:15,1.4 panta

G012^c 197.2 8:2,4.2 oudepw

Total for G012^c = 2

L019\*% 170.2 7:31,2.2 paracrð

Total for L019\*% = 1

044\* 34.4 2:2,1.4 idein ti

044\* 197.2 8:2,4.2 oudepw

Total for 044\* = 2

088% 452.1 16:6,2.1 Ýparamenw

Total for 088% = 1

6 389.2 14:31,1.2 ekastoi

Total for 6 = 1

33\* 295.2 11:20,1.2 de

33\* 357.3 13:12,1.3 di es) wj

33\* 459.2 16:15,2.2 Ac) autoj

Total for 33\* = 3

69 425.3 15:29,1.3 autwn t) nek)

Total for 69 = 1

81\*% 247.2 10:5,1.2 è omit

Total for 81\*% = 1

104\*% 17.3 1:15,1.3 ðtisqh

Total for 104\*% = 1

131\* 35.4 2:4,1.4 peiqoij anq) sof) kai l)

Total for 131\* = 1

309 164.2 7:24,1.2 è omit

Total for 309 = 1

326 195.3 8:2,2.3 einai

Total for 326 = 1

491 5.3 1:4,1.3 hmwn

Total for 491 = 1

1241\*% 34.2 2:2,1.2 2 1

Total for 1241\*% = 1

1505\*% 43.3 2:11,2.3 ð

1505\*% 230.2 9:17,1.2 ouk

Total for 1505\*% = 2

vg^cl 458.3 16:15,1.3 k) For) kai Acai@kou

Total for vg^cl = 1

vg^st 135.1 7:1,1.1 Þ omit

vg^st 194.1 8:2,1.1 Þ omit

vg^st 218.1 9:7,1.1 äton karpon

vg^st 310.1 11:29,2.1 ß omit

vg^st 356.1 13:11,1.1 Þ omit

vg^st 458.2 16:15,1.2 kai Fortounatou

vg^st 465.1 16:19,4.1 àQriska

Total for vg^st = 7

it-f\* 173.2 7:34,2.2 3&5

Total for it-f\* = 1

sy^p% 172.3 7:34,1.3 mem) de

Total for sy^p% = 1

Ambst% 391.3 14:33,1.3 ð

Total for Ambst% = 1

Cl^a% 49.4 2:15,1.4 panta

Cl^a% 63.2 3:10,2.2 teqeika

Cl^a% 356.2 13:11,1.2 de

Total for Cl^a% = 3

Cl^b% 49.4 2:15,1.4 panta

Cl^b% 63.2 3:10,2.2 teqeika

Cl^b% 356.2 13:11,1.2 de

Total for Cl^b% = 3

Did^a% 49.3 2:15,1.3 men pantaj

Did^a% 63.1 3:10,2.1 Ýeqhka

Did^a% 91.2 5:2,1.2 exarqh

Did^a% 92.1 5:2,2.1 àpraxaj

Total for Did^a% = 4

Epiph^a% 96.1 5:5,1.1 Þ omit

Total for Epiph^a% = 1

Eus^a% 226.1 9:13,2.1 Ýparedreuontej

Total for Eus^a% = 1

Eus^b% 226.1 9:13,2.1 Ýparedreuontej

Total for Eus^b% = 1

Irlat^a% 49.3 2:15,1.3 men pantaj

Irlat^a% 98.3 5:6,2.3 corrumpit

Irlat^a% 417.2 15:17,1.2 † estin

Total for Irlat^a% = 3

Meth% 356.2 13:11,1.2 de

Total for Meth% = 1

Ptol^Ir% 49.1 2:15,1.1 äta panta

Total for Ptol^Ir% = 1

Tert% 356.2 13:11,1.2 de

Total for Tert% = 1

Ex-144 284.2 11:3,1.2 ê omit

Total for Ex-144 = 1

Ex-145 35.3 2:4,1.3 peiqoi anq) sof) l)

Total for Ex-145 = 1

Ex-150 101.3 5:8,1.3 h;

Ex-150 389.3 14:31,1.3 ekas) pant)

Total for Ex-150 = 2

Ex-151 112.3 5:13,2.3 kai exareite

Ex-151 118.3 6:5,3.3 sof) oude eij

Ex-151 122.2 6:8,1.2 tauta

Ex-151 138.2 7:3,1.2 ofeilomenhn eunoian

Ex-151 157.2 7:17,3.2 qeoj

Ex-151 158.2 7:17,4.2 kurioj

Ex-151 160.3 7:18,1.3 tij eklhqh

Ex-151 194.2 8:2,1.2 de

Ex-151 197.3 8:2,4.3 oudepw ouden

Ex-151 254.3 10:10,2.3 kaqwj kai

Ex-151 379.2 14:18,3.2 lalwn

Total for Ex-151 = 11

Ex-152 91.2 5:2,1.2 exarqh

Ex-152 149.2 7:13,2.2 autoj

Ex-152 183.3 7:38,2.3 ð

Ex-152 235.2 9:21,1.2 qew

Ex-152 236.2 9:21,2.2 stw

Ex-152 241.2 9:23,1.2 touto

Ex-152 273.2 10:24,1.2 ekastoj

Ex-152 362.2 14:5,1.2 ðneuei

Ex-152 418.2 15:20,1.2 egeneto

Total for Ex-152 = 9

Ex-153 95.3 5:4,2.3 ð

Total for Ex-153 = 1

Ex-155# 2.2 1:1,2.2 2 1

Ex-155# 56.3 3:4,1.3 ouci sarkikoi

Ex-155# 63.2 3:10,2.2 teqeika

Ex-155# 78.2 4:6,2.2 fronein

Ex-155# 90.2 5:1,1.2 onomazetai

Ex-155# 100.2 5:7,2.2 uper hmwn

Ex-155# 104.2 5:10,1.2 kai

Ex-155# 140.2 7:5,2.2 nhsteia kai th

Ex-155# 153.2 7:14,2.2 andri

Ex-155# 169.3 7:31,1.3 tw ðmw toutw

Ex-155# 177.2 7:35,2.2 ðferon

Ex-155# 180.2 7:37,1.2 5 1&3

Ex-155# 182.2 7:38,1.2 ekgð

Ex-155# 185.2 7:38,4.2 ekgð

Ex-155# 186.2 7:39,1.2 nomw

Ex-155# 200.2 8:4,1.2 eteroj

Ex-155# 226.2 9:13,2.2 prosedð

Ex-155# 238.2 9:21,4.2 ê omit

Ex-155# 239.2 9:22,1.2 wj

Ex-155# 248.2 10:8,1.2 en

Ex-155# 260.2 10:13,4.2 umaj

Ex-155# 271.2 10:23,1.2 moi

Ex-155# 272.2 10:23,2.2 moi

Ex-155# 304.2 11:24,4.2 klwmenon

Ex-155# 311.2 11:31,1.2 gar

Ex-155# 321.3 12:6,2.3 estin q) o en)

Ex-155# 332.2 12:12,1.2 tou enoj

Ex-155# 341.2 12:25,1.2 ðmata

Ex-155# 356.2 13:11,1.2 de

Ex-155# 366.2 14:10,1.2 autwn

Ex-155# 370.2 14:13,1.2 dioper

Ex-155# 447.2 16:2,1.2 ðtwn

Total for Ex-155# = 32

Ex-156 43.2 2:11,2.2 1 2

Ex-156 66.2 3:13,1.2 o poihsaj touto to er) faneroj genhtai

Ex-156 315.2 12:2,2.2 amorfa

Ex-156 380.4 14:19,1.4 dia ton nomon

Ex-156 399.3 14:37,1.3 1 2

Total for Ex-156 = 5

Ex-157 275.2 10:27,2.2 panta ta ðmena

Ex-157 334.3 12:13,2.3 swma esmen

Ex-157 379.4 14:18,3.4 ð

Ex-157 396.2 14:34,5.2 toij andrasin

Ex-157 438.2 15:51,1.2 oi

Ex-157 462.2 16:19,1.2 è omit

Total for Ex-157 = 6

Ex-158 101.2 5:8,1.2 Ã mh

Ex-158 116.2 6:5,1.2 lalw

Ex-158 142.2 7:5,4.2 ê omit

Ex-158 202.2 8:6,2.2 on

Ex-158 299.2 11:23,2.2 ê omit

Ex-158 353.2 13:8,2.2 ðeiaÃ ðsetai

Ex-158 417.2 15:17,1.2 † estin

Total for Ex-158 = 7

Ex-160 18.2 1:16,1.2 ê omit

Ex-160 283.2 11:2,2.2 pantacou

Total for Ex-160 = 2

Ex-161 88.2 4:17,1.2 † auto

Ex-161 128.2 6:15,2.2 hmð

Ex-161 397.2 14:34,6.2 manqanein

Total for Ex-161 = 3

Ex-164 9.2 1:8,3.2 ê omit

Ex-164 52.2 3:2,1.2 ê omit

Ex-164 290.3 11:17,1.3 ðllwn

Ex-164 291.3 11:17,2.3 ðnwn

Ex-164 403.4 14:39,3.4 mh k) en gl)

Total for Ex-164 = 5

Ex-165# 16.2 1:14,1.2 †ð

Ex-165# 41.1 2:10,2.1 Þ omit

Ex-165# 64.1 3:12,1.1 Þ omit

Ex-165# 67.1 3:13,2.1 ê auto

Ex-165# 75.2 4:2,2.2 ðte

Ex-165# 156.2 7:17,2.2 † memeriken

Ex-165# 204.1 8:7,1.1 Ýsunhqeia

Ex-165# 207.1 8:8,2.1 àparasthsei

Ex-165# 210.1 8:11,1.1 äavpollutai gar

Ex-165# 218.1 9:7,1.1 äton karpon

Ex-165# 227.1 9:15,1.1 æouvdeij kenwsei

Ex-165# 262.1 10:16,2.1 âevstin tou aimatoj tou Cristouß

Ex-165# 281.1 10:33,1.1 Ýsumforon

Ex-165# 309.1 11:29,1.1 Þ omit

Ex-165# 310.1 11:29,2.1 ß omit

Ex-165# 343.2 12:26,2.2 ê omit

Ex-165# 352.1 13:8,1.1 Ýpiptei

Ex-165# 387.1 14:26,1.1 Þ omit

Ex-165# 410.2 15:7,1.2 epeita

Ex-165# 424.2 15:28,3.2 ê omit

Ex-165# 468.1 16:23,1.1 Þ omit

Total for Ex-165# = 21

Ex-166# 77.2 4:6,1.2 o

Ex-166# 96.3 5:5,1.3 Ihs) Cristou

Ex-166# 123.2 6:10,1.2 oute

Ex-166# 125.3 6:11,1.3 hmwn Ihs) Cr)

Ex-166# 126.2 6:14,1.2 exhgeiren

Ex-166# 135.2 7:1,1.2 moi

Ex-166# 136.2 7:2,1.2 thn ðan

Ex-166# 152.2 7:14,1.2 th pisth

Ex-166# 153.3 7:14,2.3 an) tw pistw

Ex-166# 159.2 7:17,5.2 didaskw

Ex-166# 163.2 7:22,1.2 kai

Ex-166# 170.3 7:31,2.3 crð

Ex-166# 171.2 7:32,1.2 qew

Ex-166# 209.2 8:10,1.2 ê omit

Ex-166# 219.2 9:7,2.2 ê omit

Ex-166# 220.3 9:8,1.3 t) legw

Ex-166# 229.1 9:16,2.1 àeuvaggeliswmai

Ex-166# 240.2 9:22,2.2 pantaj

Ex-166# 257.2 10:13,1.2 ou katalabh

Ex-166# 263.2 10:17,1.2 kai tou enoj pothriou

Ex-166# 265.2 10:19,1.2 2 1

Ex-166# 267.2 10:19,3.2 2 1

Ex-166# 274.2 10:27,1.2 eij deipnon

Ex-166# 276.2 10:28,1.2 eidwloqð

Ex-166# 282.2 11:2,1.2 adelfoi

Ex-166# 292.2 11:19,1.2 è omit

Ex-166# 296.2 11:22,1.2 epainw

Ex-166# 298.2 11:23,1.2 para kur)

Ex-166# 316.3 12:2,3.3 wsan hg)

Ex-166# 318.3 12:3,2.3 A) ðsou

Ex-166# 326.2 12:10,2.2 ê omit

Ex-166# 327.2 12:10,3.2 ê omit

Ex-166# 338.2 12:21,1.2 ê omit

Ex-166# 342.2 12:26,1.2 ei ti

Ex-166# 345.2 12:31,1.2 kreiona

Ex-166# 348.2 13:3,1.2 † kauqhsomai

Ex-166# 349.2 13:4,1.2 è omit

Ex-166# 365.2 14:8,1.2 2 1

Ex-166# 374.2 14:15,3.2 ê omit

Ex-166# 377.3 14:18,1.3 oti

Ex-166# 395.2 14:34,4.2 ðsqai

Ex-166# 399.4 14:37,1.4 kur) eisin entolai

Ex-166# 407.3 15:5,1.3 kai meta tauta

Ex-166# 408.2 15:5,2.2 endð

Ex-166# 412.2 15:10,2.2 ê omit

Ex-166# 419.2 15:24,1.2 paradw

Ex-166# 421.2 15:27,1.2 ê omit

Ex-166# 434.2 15:47,2.2 o ouranioj

Ex-166# 440.4 15:51,3.4 anasthsomeqaÃ ou p) de

Ex-166# 458.2 16:15,1.2 kai Fortounatou

Ex-166# 461.2 16:17,2.2 autoi

Ex-166# 465.2 16:19,4.2 ðkilla

Total for Ex-166# = 52

Ex-168$ 1.2 1:1,1.2 ê omit

Ex-168$ 3.2 1:2,1.2 5&8 1&4

Ex-168$ 5.2 1:4,1.2 † ð

Ex-168$ 6.2 1:6,1.2 qeou

Ex-168$ 7.2 1:8,1.2 acri t)

Ex-168$ 8.2 1:8,2.2 parousia

Ex-168$ 10.2 1:9,1.2 uf

Ex-168$ 11.2 1:10,1.2 ðma

Ex-168$ 13.2 1:13,1.2 mh

Ex-168$ 14.2 1:13,2.2 h'

Ex-168$ 15.2 1:13,3.2 peri

Ex-168$ 17.2 1:15,1.2 ðtisa

Ex-168$ 19.2 1:17,1.2 o

Ex-168$ 20.2 1:17,2.2 ðisasqai

Ex-168$ 21.2 1:17,3.2 logwn

Ex-168$ 22.2 1:18,1.2 ê omit

Ex-168$ 26.2 1:22,1.2 ê omit

Ex-168$ 27.2 1:23,1.2 Ellhsi

Ex-168$ 28.2 1:24,1.2 ðstoj q) ðmij k) q) ðia

Ex-168$ 29.2 1:26,1.2 oun

Ex-168$ 32.2 1:30,1.2 kai d)

Ex-168$ 34.1 2:2,1.1 äti eivdenai

Ex-168$ 36.2 2:4,2.2 apokaluyei

Ex-168$ 37.2 2:8,1.2 egnw

Ex-168$ 38.2 2:8,2.2 autwn

Ex-168$ 39.2 2:9,1.2 † osa

Ex-168$ 40.2 2:10,1.2 † gar

Ex-168$ 42.2 2:11,1.2 ê omit

Ex-168$ 44.2 2:12,1.2 toutou

Ex-168$ 45.2 2:12,2.2 idwmen

Ex-168$ 47.2 2:13,2.2 ðkwj

Ex-168$ 48.2 2:14,1.2 è omit

Ex-168$ 51.2 3:1,1.2 ðikoij

Ex-168$ 53.2 3:3,1.2 ðinoi

Ex-168$ 55.2 3:3,3.2 ðinoi

Ex-168$ 56.2 3:4,1.2 ouci anq)

Ex-168$ 57.2 3:4,2.2 kai kata anqrwpon peripateite

Ex-168$ 61.2 3:5,4.2 all h

Ex-168$ 62.2 3:10,1.2 è omit

Ex-168$ 68.2 3:14,1.2 me,nei

Ex-168$ 69.2 3:16,1.2 2 1

Ex-168$ 70.2 3:17,1.2 fqeirei

Ex-168$ 71.2 3:17,2.2 auton

Ex-168$ 72.2 3:18,1.2 kenoij logoij

Ex-168$ 73.2 3:20,1.2 anqrwpwn

Ex-168$ 76.2 4:5,1.2 ê omit

Ex-168$ 83.2 4:13,2.2 wsperi kaq)

Ex-168$ 84.1 4:14,1.1 Ýnouqetwn

Ex-168$ 85.2 4:15,1.2 ê omit

Ex-168$ 86.2 4:15,2.2 ê omit

Ex-168$ 87.2 4:16,1.2 kaqwj kagw Cristou

Ex-168$ 92.2 5:2,2.2 poihsaj

Ex-168$ 94.2 5:4,1.2 † 2

Ex-168$ 95.2 5:4,2.2 2

Ex-168$ 96.4 5:5,1.4 hmwn Ihs) Cr)

Ex-168$ 97.2 5:6,1.2 ê omit

Ex-168$ 102.2 5:8,2.2 porneiaj

Ex-168$ 110.2 5:12,2.2 touj eswqen um) krinate

Ex-168$ 111.2 5:13,1.2 kri,nei

Ex-168$ 112.2 5:13,2.2 exairete

Ex-168$ 113.2 6:1,1.2 ex

Ex-168$ 117.2 6:5,2.2 estin

Ex-168$ 118.2 6:5,3.2 2

Ex-168$ 119.2 6:5,4.2 kai tou adelfou

Ex-168$ 121.2 6:7,2.2 krima

Ex-168$ 129.2 6:15,3.2 ara

Ex-168$ 130.2 6:16,1.2 ê omit

Ex-168$ 131.2 6:19,1.2 ta swmata

Ex-168$ 132.2 6:19,2.2 2 1

Ex-168$ 133.2 6:20,1.2 arate

Ex-168$ 137.2 7:2,2.2 è omit

Ex-168$ 139.2 7:5,1.2 ê omit

Ex-168$ 147.2 7:10,1.2 ðizesqai

Ex-168$ 150.2 7:13,3.2 eudð

Ex-168$ 154.1 7:15,1.1 Ýumaj

Ex-168$ 155.2 7:17,1.2 h'

Ex-168$ 160.2 7:18,1.2 2 1

Ex-168$ 161.2 7:20,1.2 en

Ex-168$ 162.2 7:21,1.2 ê omit

Ex-168$ 165.2 7:28,1.2 labhj gunaika

Ex-168$ 166.2 7:28,2.2 ê omit

Ex-168$ 167.2 7:29,1.2 oti

Ex-168$ 168.2 7:29,2.2 ê omit

Ex-168$ 169.2 7:31,1.2 t) k) touton

Ex-168$ 173.3 7:34,2.3 3&5 1 2

Ex-168$ 174.2 7:34,3.2 ê omit

Ex-168$ 175.2 7:34,4.2 è omit

Ex-168$ 179.2 7:36,1.2 ðeitw

Ex-168$ 183.2 7:38,2.2 t) p) aut)

Ex-168$ 184.2 7:38,3.2 poihsei

Ex-168$ 186.3 7:39,1.3 gamw

Ex-168$ 188.2 7:39,3.2 apoqanh

Ex-168$ 189.2 7:40,1.2 makaria

Ex-168$ 190.2 7:40,2.2 gar

Ex-168$ 191.2 7:40,3.2 Cristou

Ex-168$ 193.2 8:1,1.2 de

Ex-168$ 196.2 8:2,3.2 ê omit

Ex-168$ 198.2 8:3,1.2 è omit

Ex-168$ 201.2 8:6,1.2 ê omit

Ex-168$ 203.2 8:6,3.2 Ã kai e] n pneuma agionÃ en w ta panta kai hmeij en autw

Ex-168$ 205.2 8:7,2.2 asqenousa

Ex-168$ 208.1 8:8,3.1 äoute evan mh fagwmen usteroumeqa oute evan fagwmen perisseuomen

Ex-168$ 210.2 8:11,1.2 ap) oun

Ex-168$ 211.2 8:11,2.2 ad) en t) s) gn)

Ex-168$ 212.2 8:12,1.2 ê omit

Ex-168$ 213.2 8:13,1.2 ê omit

Ex-168$ 214.2 8:13,2.2 ê omit

Ex-168$ 216.2 9:2,1.2 thj emhj

Ex-168$ 217.2 9:5,1.2 gunaikaj

Ex-168$ 220.2 9:8,1.2 legw

Ex-168$ 221.2 9:9,1.2 1&3 5 6

Ex-168$ 222.1 9:9,2.1 Ýkhmwseij

Ex-168$ 227.2 9:15,1.2 ouqeij mh kainwsei

Ex-168$ 228.2 9:16,1.2 carij

Ex-168$ 229.3 9:16,2.3 ðzomai

Ex-168$ 232.2 9:18,2.2 tou Cristou

Ex-168$ 234.2 9:20,2.2 è omit

Ex-168$ 242.2 9:25,1.2 ê omit

Ex-168$ 244.2 10:3,1.2 to

Ex-168$ 245.2 10:4,1.2 ê omit

Ex-168$ 246.2 10:4,2.2 2 1

Ex-168$ 249.2 10:8,2.2 tessarej

Ex-168$ 251.2 10:9,2.2 exepð

Ex-168$ 252.2 10:9,3.2 apwlonto

Ex-168$ 255.2 10:11,1.2 panta de tauta

Ex-168$ 256.2 10:11,2.2 tupoi ðnon

Ex-168$ 258.2 10:13,2.2 afhsei

Ex-168$ 259.2 10:13,3.2 2 1

Ex-168$ 264.1 10:18,1.1 Ýouvc

Ex-168$ 268.1 10:20,1.1 Ýquousin

Ex-168$ 270.2 10:20,3.2 daim) koin)

Ex-168$ 277.2 10:28,2.2 è omit

Ex-168$ 279.2 10:29,1.2 apistou

Ex-168$ 280.2 10:31,1.2 ê omit

Ex-168$ 286.2 11:9,1.2 anqrwpon

Ex-168$ 287.2 11:10,1.2 kalumma

Ex-168$ 293.1 11:19,2.1 êkai

Ex-168$ 294.2 11:19,3.2 è omit

Ex-168$ 295.3 11:20,1.3 ð

Ex-168$ 297.2 11:22,2.2 ê omit

Ex-168$ 298.3 11:23,1.3 apo qeou

Ex-168$ 300.2 11:23,3.2 ton

Ex-168$ 303.2 11:24,3.2 ê omit

Ex-168$ 305.2 11:25,1.2 aim) mou

Ex-168$ 308.2 11:27,2.2 tou kuriou

Ex-168$ 312.2 11:32,1.2 ê omit

Ex-168$ 314.2 12:2,1.2 2

Ex-168$ 317.2 12:3,1.2 ê omit

Ex-168$ 319.2 12:3,3.2 ðion ðsoun

Ex-168$ 320.2 12:6,1.2 kai o

Ex-168$ 325.2 12:10,1.2 energeia dunamewj

Ex-168$ 330.2 12:10,6.2 diermð

Ex-168$ 334.2 12:13,2.2 poma epot)

Ex-168$ 335.2 12:18,1.2 † nun

Ex-168$ 336.2 12:19,1.2 ê omit

Ex-168$ 339.2 12:24,1.2 timhj

Ex-168$ 344.2 12:27,1.2 melouj

Ex-168$ 346.2 12:31,2.2 ei ti

Ex-168$ 348.3 13:3,1.3 ðqhswmai

Ex-168$ 350.2 13:5,1.2 euscð

Ex-168$ 355.2 13:10,1.2 tote

Ex-168$ 357.2 13:12,1.2 wj di es)

Ex-168$ 358.2 13:13,1.2 4&6 1&3

Ex-168$ 360.2 14:2,2.2 pneuma

Ex-168$ 361.2 14:4,1.2 qeou

Ex-168$ 363.2 14:6,1.2 ê omit

Ex-168$ 368.2 14:12,1.2 ðmatikwn

Ex-168$ 369.2 14:12,2.2 profhteuhte

Ex-168$ 371.2 14:14,1.2 ê omit

Ex-168$ 372.2 14:15,1.2 ðxwmai

Ex-168$ 373.2 14:15,2.2 xwmai

Ex-168$ 375.2 14:16,1.2 ðghshj

Ex-168$ 377.2 14:18,1.2 mou

Ex-168$ 378.1 14:18,2.1 Ýglwssaij

Ex-168$ 379.3 14:18,3.3 lalein

Ex-168$ 381.2 14:21,1.2 ean

Ex-168$ 383.2 14:23,1.2 elqh

Ex-168$ 384.2 14:25,1.2 kai outw

Ex-168$ 385.2 14:25,2.2 dianoiaj

Ex-168$ 388.2 14:28,1.2 ermð

Ex-168$ 389.4 14:31,1.4 ð

Ex-168$ 390.2 14:32,1.2 ðma

Ex-168$ 391.2 14:33,1.2 q)

Ex-168$ 392.2 14:34,1.2 vss 34/35 pon) p)

Ex-168$ 393.2 14:34,2.2 umwn

Ex-168$ 394.2 14:34,3.2 epitetraptai

Ex-168$ 398.2 14:34,7.2 ê omit

Ex-168$ 401.1 14:39,1.1 êmou

Ex-168$ 402.2 14:39,2.2 ê omit

Ex-168$ 403.3 14:39,3.3 en gl) mh k)

Ex-168$ 404.2 14:40,1.2 hic vss 34/35 add)

Ex-168$ 405.2 15:2,1.2 ofeilete katecein

Ex-168$ 406.2 15:3,1.2 è omit

Ex-168$ 407.2 15:5,1.2 epeita

Ex-168$ 411.2 15:10,1.2 kenh ouk eg)

Ex-168$ 414.1 15:14,1.1 êkai

Ex-168$ 420.2 15:25,1.2 autou

Ex-168$ 422.2 15:28,1.2 ê omit

Ex-168$ 423.2 15:28,2.2 è omit

Ex-168$ 426.2 15:31,1.2 hmð

Ex-168$ 428.2 15:31,3.2 kuriw

Ex-168$ 429.2 15:34,1.2 legw

Ex-168$ 431.2 15:45,1.2 ê omit

Ex-168$ 432.2 15:45,2.2 ê omit

Ex-168$ 435.1 15:49,1.1 Ýforesomen

Ex-168$ 437.1 15:50,2.1 äklhronomhsai ouv dunatai

Ex-168$ 439.1 15:51,2.1 ß omit

Ex-168$ 441.2 15:52,1.2 roph

Ex-168$ 442.2 15:52,2.2 anasthsð

Ex-168$ 444.2 15:54,2.2 neikoj

Ex-168$ 445.2 15:54,3.2 6 2&5 1

Ex-168$ 446.2 15:54,4.2 neikoj

Ex-168$ 449.2 16:3,1.2 dokimazete

Ex-168$ 450.2 16:4,1.2 2 1

Ex-168$ 451.2 16:6,1.2 ê omit

Ex-168$ 452.2 16:6,2.2 † katamð

Ex-168$ 453.2 16:6,3.2 1

Ex-168$ 456.2 16:10,1.2 egw

Ex-168$ 457.2 16:12,1.2 dhlw umin oti

Ex-168$ 459.3 16:15,2.3 Asiaj

Ex-168$ 460.1 16:17,1.1 Ýumeteron

Ex-168$ 464.2 16:19,3.2 ðzontai

Ex-168$ 467.2 16:22,1.2 maran aqa

Ex-168$ 469.1 16:24,1.1 Þ omit

Total for Ex-168$ = 224

Ex-169$ 7.3 1:8,1.3 teleiouj

Ex-169$ 12.2 1:11,1.2 ê omit

Ex-169$ 16.3 1:14,1.3 t) q) mou

Ex-169$ 23.2 1:18,2.2 ê omit

Ex-169$ 24.2 1:18,3.2 ê omit

Ex-169$ 34.3 2:2,1.3 tou eid)ti

Ex-169$ 46.2 2:13,1.2 agiou

Ex-169$ 49.5 2:15,1.5 men ta panta

Ex-169$ 54.2 3:3,2.2 kai dicostasiai

Ex-169$ 60.2 3:5,3.2 Paul) ëëë Ap)

Ex-169$ 65.2 3:12,2.2 † ðsionÃ ðrion

Ex-169$ 74.2 4:2,1.2 o] de

Ex-169$ 81.2 4:11,1.2 gumnhtð

Ex-169$ 89.2 4:17,2.2 1

Ex-169$ 93.2 5:3,1.2 wj

Ex-169$ 94.3 5:4,1.3 hm) Ihs) Cristou

Ex-169$ 106.2 5:10,3.2 ofð

Ex-169$ 107.2 5:11,1.2 nuni

Ex-169$ 109.2 5:12,1.2 kai

Ex-169$ 114.2 6:2,1.2 ê omit

Ex-169$ 120.2 6:7,1.2 ê omit

Ex-169$ 124.2 6:10,2.2 ou

Ex-169$ 125.2 6:11,1.2 1

Ex-169$ 126.3 6:14,1.3 exegeirei

Ex-169$ 129.3 6:15,3.3 h' ara

Ex-169$ 133.3 6:20,1.3 ð

Ex-169$ 134.2 6:20,2.2 kai en tw pneumati umwnÃ atina estin tou qeou

Ex-169$ 146.2 7:9,1.2 † gamein

Ex-169$ 147.3 7:10,1.3 ðizesqw

Ex-169$ 157.3 7:17,3.3 qeoj

Ex-169$ 158.3 7:17,4.3 qeoj

Ex-169$ 163.3 7:22,1.3 de kai

Ex-169$ 172.2 7:34,1.2 2 3

Ex-169$ 180.3 7:37,1.3 1&4

Ex-169$ 187.2 7:39,2.2 kai

Ex-169$ 192.2 7:40,4.2 ecw

Ex-169$ 199.2 8:3,2.2 è omit

Ex-169$ 206.2 8:8,1.2 umð

Ex-169$ 211.3 8:11,2.3 ad) epi t) s) gn)

Ex-169$ 215.2 9:1,1.2 4 2 3 1

Ex-169$ 221.3 9:9,1.3 gegr) gar

Ex-169$ 225.2 9:13,1.2 ê omit

Ex-169$ 227.3 9:15,1.3 tij kenð

Ex-169$ 233.2 9:20,1.2 ê omit

Ex-169$ 243.2 10:2,1.2 † ðisanto

Ex-169$ 250.3 10:9,1.3 qeon

Ex-169$ 253.2 10:10,1.2 ðzwmen

Ex-169$ 254.2 10:10,2.2 kaqwj

Ex-169$ 270.3 10:20,3.3 kan) daim)

Ex-169$ 278.2 10:28,3.2 tou gar kuriou h gh kai to plhrwma authj

Ex-169$ 285.2 11:5,1.2 eauð

Ex-169$ 288.2 11:14,1.2 h;

Ex-169$ 289.2 11:15,1.2 ê omit

Ex-169$ 290.4 11:17,1.4 ðllw

Ex-169$ 291.4 11:17,2.4 nw

Ex-169$ 301.2 11:24,1.2 labete fagete

Ex-169$ 304.4 11:24,4.4 didomenon

Ex-169$ 307.2 11:27,1.2 touton

Ex-169$ 314.3 12:2,1.3 1

Ex-169$ 316.2 12:2,3.2 wj anhgesqe

Ex-169$ 318.2 12:3,2.2 A) ðsoun

Ex-169$ 321.2 12:6,2.2 q) o en) estin

Ex-169$ 324.3 12:9,3.3 ð

Ex-169$ 333.2 12:13,1.2 eij

Ex-169$ 337.2 12:20,1.2 ê omit

Ex-169$ 348.4 13:3,1.4 kauqh

Ex-169$ 349.3 13:4,1.3 pon) p) perp)

Ex-169$ 351.3 13:5,2.3 to mh

Ex-169$ 354.2 13:8,3.2 ðseijÃ ðsontai

Ex-169$ 357.4 13:12,1.4 di es) kai

Ex-169$ 362.3 14:5,1.3 tij ðneuei )

Ex-169$ 364.2 14:7,1.2 fqoggou

Ex-169$ 376.2 14:16,2.2 tw

Ex-169$ 377.4 14:18,1.4 uper

Ex-169$ 380.2 14:19,1.2 en tw n) m)

Ex-169$ 386.2 14:25,3.2 ê omit

Ex-169$ 399.2 14:37,1.2 1 3 2

Ex-169$ 411.3 15:10,1.3 ptwch ouk eg)

Ex-169$ 415.2 15:14,2.2 hmð

Ex-169$ 416.2 15:15,1.2 è omit

Ex-169$ 425.2 15:29,1.2 twn nekrwn

Ex-169$ 427.2 15:31,2.2 ê omit

Ex-169$ 430.2 15:37,1.2 gennhð

Ex-169$ 433.2 15:47,1.2 o kurioj

Ex-169$ 437.3 15:50,2.3 ou klhronomhsousin

Ex-169$ 440.2 15:51,3.2 2 1 3 4

Ex-169$ 443.3 15:54,1.3 7&11 6 1&5

Ex-169$ 445.4 15:54,3.4 ni)\* p) s)Ã adhÃ to ken)

Ex-169$ 453.3 16:6,3.3 2

Ex-169$ 454.2 16:7,1.2 de

Ex-169$ 455.2 16:8,1.2 ðme,nw

Ex-169$ 458.3 16:15,1.3 k) For) kai Acai@kou

Ex-169$ 467.3 16:22,1.3 maranaqa

Ex-169$ 469.3 16:24,1.3 geneqhtw geneqhtw

Total for Ex-169$ = 94

Ex-170$ 35.5 2:4,1.5 peiqoij sof)

Ex-170$ 65.3 3:12,2.3 ðson kai ðron

Ex-170$ 89.3 4:17,2.3 kuriw Ihs)

Ex-170$ 94.4 5:4,1.4 Ihs) Cr)

Ex-170$ 231.3 9:18,1.3 estai moi

Ex-170$ 362.5 14:5,1.5 h= ? o diðneuwn

Ex-170$ 399.5 14:37,1.5 qeou est) ðlh

Ex-170$ 440.3 15:51,3.3 ou koi)Ã ou p) de

Total for Ex-170$ = 8

Ex-171$ 65.4 3:12,2.4 ðsion kai ðrion

Ex-171$ 433.4 15:47,1.4 anq) pneumatikoj

Total for Ex-171$ = 2

Ex-172$ 4.2 1:2,2.2 te

Ex-172$ 25.2 1:20,1.2 toutou

Ex-172$ 30.1 1:28,1.1 Þ omit

Ex-172$ 31.1 1:29,1.1 ätou qeou

Ex-172$ 33.2 2:1,1.2 † marturion

Ex-172$ 35.2 2:4,1.2 peiqoij anqrwpinhj sof) l)

Ex-172$ 49.2 2:15,1.2 † men panta

Ex-172$ 50.2 2:16,1.2 kuriou

Ex-172$ 58.2 3:5,1.2 tij

Ex-172$ 59.2 3:5,2.2 tij

Ex-172$ 79.2 4:9,1.2 oti

Ex-172$ 82.2 4:13,1.2 blasfð

Ex-172$ 96.2 5:5,1.2 Ihsou

Ex-172$ 99.2 5:7,1.2 oun

Ex-172$ 105.1 5:10,2.1 Ýkai

Ex-172$ 108.2 5:11,2.2 h;

Ex-172$ 115.2 6:2,2.2 kri,nousin

Ex-172$ 127.2 6:15,1.2 h

Ex-172$ 141.2 7:5,3.2 sunerchsqe

Ex-172$ 143.2 7:7,1.2 gar

Ex-172$ 144.2 7:7,2.2 oj

Ex-172$ 145.2 7:7,3.2 oj

Ex-172$ 148.2 7:13,1.2 † htij

Ex-172$ 151.2 7:13,4.2 auton

Ex-172$ 172.4 7:34,1.4 1 2

Ex-172$ 173.1 7:34,2.1 æh agamoj kai h parqenoj

Ex-172$ 176.2 7:35,1.2 ê omit

Ex-172$ 195.2 8:2,2.2 eidenai

Ex-172$ 210.4 8:11,1.4 kai apoleitai

Ex-172$ 223.2 9:10,1.2 thj elpidoj autou met) ep elp)

Ex-172$ 224.2 9:12,1.2 ekkð

Ex-172$ 231.2 9:18,1.2 moi es)

Ex-172$ 237.2 9:21,3.2 kerdhsw

Ex-172$ 250.2 10:9,1.2 † kurion

Ex-172$ 255.1 10:11,1.1 ätauta de

Ex-172$ 261.2 10:16,1.2 eucaristiaj

Ex-172$ 266.2 10:19,2.2 è omit

Ex-172$ 269.2 10:20,2.2 4 1&3

Ex-172$ 289.3 11:15,1.3 pon) a) ded)

Ex-172$ 290.1 11:17,1.1 Ýparaggellwn

Ex-172$ 291.1 11:17,2.1 àevpainw

Ex-172$ 302.2 11:24,2.2 2 1

Ex-172$ 306.2 11:26,1.2 touto

Ex-172$ 313.2 11:34,1.2 de

Ex-172$ 322.2 12:9,1.2 de

Ex-172$ 323.2 12:9,2.2 ðma

Ex-172$ 324.2 12:9,3.2 autw

Ex-172$ 328.2 12:10,4.2 ðsij

Ex-172$ 329.2 12:10,5.2 de

Ex-172$ 331.2 12:11,1.2 ê omit

Ex-172$ 340.2 12:24,2.2 ðrounti

Ex-172$ 347.2 13:2,1.2 ðnein

Ex-172$ 359.2 14:2,1.2 tw

Ex-172$ 367.2 14:11,1.2 ê omit

Ex-172$ 376.3 14:16,2.3 ð

Ex-172$ 380.3 14:19,1.3 dia tou nooj mou

Ex-172$ 382.2 14:21,2.2 ðroij

Ex-172$ 400.2 14:38,1.2 ðeitw

Ex-172$ 403.1 14:39,3.1 ämh kwluete glwssaij

Ex-172$ 409.2 15:6,1.2 kai

Ex-172$ 413.2 15:12,1.2 2 3 1

Ex-172$ 433.3 15:47,1.3 anq) o kur)

Ex-172$ 436.2 15:50,1.2 gar

Ex-172$ 443.2 15:54,1.2 7&11

Ex-172$ 445.3 15:54,3.3 ken)\* p) s)Ã adhÃ to ni)

Ex-172$ 448.2 16:2,2.2 ðdwqh

Ex-172$ 463.2 16:19,2.2 è omit

Ex-172$ 466.2 16:19,5.2 par oij kai xenizomai

Total for Ex-172$ = 68

Total = 628

Appendix H: Witnesses where a variant is introduced:

1.1 1:1,1.1 Autograph;

1.2 1:1,1.2 [P^61%]<3>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [81\*%]<3>; [Ex-157]<3>; Ex-168$<1>;

2.1 1:1,2.1 [D06^2]<4>; [33\*]<5>; [vg^cl]<4>; Autograph;

2.2 1:1,2.2 [vg^st]<4>; [it-b\*]<5>; Ex-155#<1>; [Ex-161]<2>;

3.1 1:2,1.1 [Ex-146]<5>; Autograph;

3.2 1:2,1.2 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [it-b\*]<5>; [Ambst%]<5>; [Ex-151]<3>; [Ex-164]<2>; Ex-168$<1>;

4.1 1:2,2.1 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

4.2 1:2,2.2 [A^c]<4>; [Ex-150]<5>; [Ex-155#]<1>; [Ex-168$]<1>; Ex-172$<1>;

5.1 1:4,1.1 Autograph;

5.2 1:4,1.2 [01\*]<4>; [Ex-164]<2>; Ex-168$<1>;

5.3 1:4,1.3 491<5>;

6.1 1:6,1.1 Autograph;

6.2 1:6,1.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [81\*%]<3>; [1175\*%]<3>; [1175^c%]<3>; [sa^b%]<2>; [Eus^a%]<3>; [Eus^b%]<3>; [Ex-144]<4>; Ex-168$<1>;

7.1 1:8,1.1 Autograph;

7.2 1:8,1.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-168$<1>;

7.3 1:8,1.3 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-169$<1>;

8.1 1:8,2.1 Autograph;

8.2 1:8,2.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-168$<1>;

9.1 1:8,3.1 Autograph;

9.2 1:8,3.2 Ex-164<2>;

10.1 1:9,1.1 Autograph;

10.2 1:9,1.2 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-168$<1>;

11.1 1:10,1.1 Autograph;

11.2 1:10,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [33\*]<5>; Ex-168$<1>;

12.1 1:11,1.1 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

12.2 1:11,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [C\*%]<4>; [104\*%]<3>; [Ex-160]<3>; Ex-169$<1>;

13.1 1:13,1.1 Autograph;

13.2 1:13,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [326]<5>; [2464\*%]<3>; [sa^a%]<2>; [sy^p%]<6>; Ex-168$<1>;

14.1 1:13,2.1 Autograph;

14.2 1:13,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [sy^p%]<6>; Ex-168$<1>;

15.1 1:13,3.1 Autograph;

15.2 1:13,3.2 [D06\*]<5>; [Ex-164]<2>; Ex-168$<1>;

16.1 1:14,1.1 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [NA-27]<2>; [bo^b%]<2>; [Ex-147]<6>; Autograph;

16.2 1:14,1.2 [6]<6>; Ex-165#<1>;

16.3 1:14,1.3 [33\*]<5>; [81\*%]<3>; [326]<5>; [vg^b]<3>; [it-ar]<5>; [sy^p%]<6>; [Ex-157]<3>; Ex-169$<1>;

17.1 1:15,1.1 [6]<6>; Autograph;

17.2 1:15,1.2 [C^3%]<4>; [D06^c%]<3>; [D06^1]<2>; [it-g%]<2>; [it-r%]<3>; [Tert%]<4>; [Ex-147]<6>; [Ex-152]<2>; [Ex-160]<3>; Ex-168$<1>;

17.3 1:15,1.3 104\*%<3>;

18.1 1:16,1.1 [D06\*]<5>; Autograph;

18.2 1:16,1.2 Ex-160<3>;

19.1 1:17,1.1 Autograph;

19.2 1:17,1.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [323\*]<5>; [Ex-164]<2>; Ex-168$<1>;

20.1 1:17,2.1 Autograph;

20.2 1:17,2.2 [365%]<5>; [Ex-158]<3>; Ex-168$<1>;

21.1 1:17,3.1 Autograph;

21.2 1:17,3.2 [P^11%]<4>; [sy^p%]<6>; Ex-168$<1>;

22.1 1:18,1.1 Autograph;

22.2 1:18,1.2 [F\*]<5>; [G012\*]<5>; [Ex-150]<5>; [Ex-164]<2>; Ex-168$<1>;

23.1 1:18,2.1 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [it-ar]<5>; Autograph;

23.2 1:18,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [it-r%]<3>; [Ex-160]<3>; Ex-169$<1>;

24.1 1:18,3.1 [D06\*]<5>; [D06^c%]<3>; Autograph;

24.2 1:18,3.2 [6]<6>; [it-g%]<2>; [it-t%]<2>; [Ex-162]<2>; Ex-169$<1>;

25.1 1:20,1.1 [D06\*]<5>; [630%]<6>; [1739\*]<6>; [Cl^b%]<3>; [Spec%]<5>; Autograph;

25.2 1:20,1.2 [P^11%]<4>; [C^3%]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Cl^a%]<3>; [Epiph^a%]<3>; [Epiph^b%]<3>; [Ex-150]<5>; [Ex-155#]<1>; [Ex-168$]<1>; Ex-172$<1>;

26.1 1:22,1.1 Autograph;

26.2 1:22,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [323\*]<5>; [vg^b]<3>; [sy^p%]<6>; [Ambst%]<5>; [Cyp^a%]<5>; [Tert%]<4>; Ex-168$<1>;

27.1 1:23,1.1 [L019\*%]<6>; Autograph;

27.2 1:23,1.2 [C^3%]<4>; [Cl^a%]<3>; [Cl^b%]<3>; [Ex-150]<5>; [Ex-151]<3>; Ex-168$<1>;

28.1 1:24,1.1 Autograph;

28.2 1:24,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [Cl^a%]<3>; [Cl^b%]<3>; Ex-168$<1>;

29.1 1:26,1.1 Autograph;

29.2 1:26,1.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-168$<1>;

30.1 1:28,1.1 [l^1575]<5>; [Tert%]<4>; [Ex-160]<3>; [Ex-165#]<1>; [Ex-168$]<1>; Ex-172$<1>;

30.2 1:28,1.2 [C^3%]<4>; [Ex-147]<6>; [Ex-158]<3>; Autograph;

31.1 1:29,1.1 [01^c%]<2>; [D06^c%]<3>; [D06^1]<2>; [vg^st]<4>; [it-e%]<2>; [it-r%]<3>; [Ex-151]<3>; [Ex-160]<3>; [Ex-165#]<1>; [Ex-168$]<1>; Ex-172$<1>;

31.2 1:29,1.2 [C\*%]<4>; [629]<5>; [TR]<5>; [sy^h%]<4>; [sy^p%]<6>; Autograph;

32.1 1:30,1.1 [630%]<6>; Autograph;

32.2 1:30,1.2 [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [1505\*%]<3>; [Ex-150]<5>; Ex-168$<1>;

33.1 2:1,1.1 [sy^p%]<6>; Autograph;

33.2 2:1,1.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [it-b\*]<5>; [sa^a%]<2>; [Ex-153]<4>; [Ex-155#]<1>; [Ex-158]<3>; [Ex-163]<2>; [Ex-168$]<1>; Ex-172$<1>;

34.1 2:2,1.1 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [P025\*%]<3>; [81\*%]<3>; [NA-27]<2>; [Ex-153]<4>; [Ex-164]<2>; Ex-168$<1>;

34.2 2:2,1.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [6]<6>; 1241\*%<2>; Autograph;

34.3 2:2,1.3 [Ex-147]<6>; [Ex-152]<2>; Ex-169$<1>;

34.4 2:2,1.4 044\*<3>;

35.1 2:4,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [vg^st]<4>; [sy^p%]<6>; Autograph;

35.2 2:4,1.2 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [630%]<6>; [vg^cl]<4>; [Ex-155#]<1>; [Ex-157]<3>; [Ex-169$]<1>; Ex-172$<1>;

35.3 2:4,1.3 Ex-145<5>;

35.4 2:4,1.4 131\*<6>;

35.5 2:4,1.5 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-170$<1>;

36.1 2:4,2.1 Autograph;

36.2 2:4,2.2 [D06\*]<5>; [D06^2]<4>; Ex-168$<1>;

37.1 2:8,1.1 Autograph;

37.2 2:8,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-168$<1>;

38.1 2:8,2.1 Autograph;

38.2 2:8,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-168$<1>;

39.1 2:9,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Cl^a%]<3>; [Cl^b%]<3>; Autograph;

39.2 2:9,1.2 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [Did^a%]<3>; [Ex-157]<3>; [Ex-158]<3>; Ex-168$<1>;

40.1 2:10,1.1 [Ex-147]<6>; Autograph;

40.2 2:10,1.2 [6]<6>; [365%]<5>; [1175\*%]<3>; [1175^c%]<3>; [Cl^a%]<3>; [Cl^b%]<3>; [Spec%]<5>; [Ex-150]<5>; [Ex-164]<2>; Ex-168$<1>;

41.1 2:10,2.1 [Cl^a%]<3>; [Cl^b%]<3>; Ex-165#<1>;

41.2 2:10,2.2 [33\*]<5>; [sa^b%]<2>; Autograph;

42.1 2:11,1.1 [P^11%]<4>; Autograph;

42.2 2:11,1.2 [33\*]<5>; [Ex-157]<3>; Ex-168$<1>;

43.1 2:11,2.1 [D06\*]<5>; Autograph;

43.2 2:11,2.2 Ex-156<4>;

43.3 2:11,2.3 1505\*%<3>;

44.1 2:12,1.1 Autograph;

44.2 2:12,1.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [bo^a%]<2>; [bo^b%]<2>; Ex-168$<1>;

45.1 2:12,2.1 Autograph;

45.2 2:12,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [L019\*%]<6>; [P025\*%]<3>; [0289%]<2>; [1506%]<5>; [2464\*%]<3>; [pm^b]<5>; [Ex-147]<6>; Ex-168$<1>;

46.1 2:13,1.1 [6]<6>; [sy^p%]<6>; Autograph;

46.2 2:13,1.2 [D06^1]<2>; [vg^b]<3>; [Ex-151]<3>; Ex-169$<1>;

47.1 2:13,2.1 Autograph;

47.2 2:13,2.2 [33\*]<5>; [Ex-158]<3>; Ex-168$<1>;

48.1 2:14,1.1 Autograph;

48.2 2:14,1.2 [1506%]<5>; [sy^p%]<6>; [Cl^b%]<3>; [Ptol^Ir%]<3>; Ex-168$<1>;

49.1 2:15,1.1 [D06\*]<5>; Ptol^Ir%<3>; Autograph;

49.2 2:15,1.2 [01^1%]<4>; [0289%]<2>; [Ex-147]<6>; [Ex-155#]<1>; [Ex-158]<3>; [Ex-168$]<1>; Ex-172$<1>;

49.3 2:15,1.3 Did^a%<3>; Irlat^a%<3>;

49.4 2:15,1.4 F\*<5>; G012\*<5>; G012^c<5>; Cl^a%<3>; Cl^b%<3>;

49.5 2:15,1.5 [P025\*%]<3>; [6]<6>; [81\*%]<3>; [Ex-153]<4>; Ex-169$<1>;

50.1 2:16,1.1 Autograph;

50.2 2:16,1.2 [81\*%]<3>; [it-g%]<2>; [Ex-158]<3>; [Ex-162]<2>; [Ex-168$]<1>; Ex-172$<1>;

51.1 3:1,1.1 [D06\*]<5>; [Cl^b%]<3>; [Ex-148]<5>; Autograph;

51.2 3:1,1.2 [C^3%]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Cl^a%]<3>; [Ex-147]<6>; [Ex-152]<2>; Ex-168$<1>;

52.1 3:2,1.1 [Cl^a%]<3>; [Cl^b%]<3>; Autograph;

52.2 3:2,1.2 Ex-164<2>;

53.1 3:3,1.1 Autograph;

53.2 3:3,1.2 [D06\*]<5>; [D06^c%]<3>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-168$<1>;

54.1 3:3,2.1 [it-r%]<3>; [Ambst%]<5>; Autograph;

54.2 3:3,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [D06^1]<2>; [33\*]<5>; [Ex-151]<3>; [Ex-162]<2>; Ex-169$<1>;

55.1 3:3,3.1 Autograph;

55.2 3:3,3.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [D06\*]<5>; [D06^c%]<3>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-168$<1>;

56.1 3:4,1.1 Autograph;

56.2 3:4,1.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [629]<5>; Ex-168$<1>;

56.3 3:4,1.3 Ex-155#<1>;

57.1 3:4,2.1 Autograph;

57.2 3:4,2.2 [P025\*%]<3>; [vg^b]<3>; Ex-168$<1>;

58.1 3:5,1.1 Autograph;

58.2 3:5,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Ex-147]<6>; [Ex-155#]<1>; [Ex-168$]<1>; Ex-172$<1>;

59.1 3:5,2.1 Autograph;

59.2 3:5,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Ex-147]<6>; [Ex-155#]<1>; [Ex-168$]<1>; Ex-172$<1>;

60.1 3:5,3.1 [D06^2]<4>; [629]<5>; Autograph;

60.2 3:5,3.2 [D06^1]<2>; [Ex-152]<2>; Ex-169$<1>;

61.1 3:5,4.1 [6]<6>; Autograph;

61.2 3:5,4.2 [33\*]<5>; [Ex-147]<6>; [Ex-152]<2>; Ex-168$<1>;

62.1 3:10,1.1 Autograph;

62.2 3:10,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [81\*%]<3>; [1505\*%]<3>; [vg^b]<3>; [it-b\*]<5>; [it-f\*]<3>; [Cl^a%]<3>; [Cl^b%]<3>; Ex-168$<1>;

63.1 3:10,2.1 [l^249]<4>; Did^a%<3>; Autograph;

63.2 3:10,2.2 [C^3%]<4>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; Cl^a%<3>; Cl^b%<3>; [Ex-147]<6>; Ex-155#<1>;

64.1 3:12,1.1 [vg^b]<3>; Ex-165#<1>;

64.2 3:12,1.2 [C^3%]<4>; [bo^a%]<2>; [Ex-153]<4>; Autograph;

65.1 3:12,2.1 [33\*]<5>; [Ex-147]<6>; Autograph;

65.2 3:12,2.2 [01^c%]<2>; [01^2]<2>; [1175\*%]<3>; [1175^c%]<3>; [l^249]<4>; [Ex-154]<3>; Ex-169$<1>;

65.3 3:12,2.3 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-170$<1>;

65.4 3:12,2.4 [0289%]<2>; [sy^p%]<6>; [Cl^a%]<3>; [Cl^b%]<3>; [Ex-158]<3>; Ex-171$<1>;

66.1 3:13,1.1 Autograph;

66.2 3:13,1.2 Ex-156<4>;

67.1 3:13,2.1 [6]<6>; [l^249]<4>; Ex-165#<1>;

67.2 3:13,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [01\*]<4>; [01^1%]<4>; [0289%]<2>; [Ex-147]<6>; Autograph;

68.1 3:14,1.1 [Ex-147]<6>; Autograph;

68.2 3:14,1.2 [B^2]<4>; [Ex-150]<5>; [Ex-152]<2>; Ex-168$<1>;

69.1 3:16,1.1 [Ex-147]<6>; Autograph;

69.2 3:16,1.2 [P025\*%]<3>; [0289%]<2>; [1175\*%]<3>; [1175^c%]<3>; [Tert%]<4>; [Ex-153]<4>; [Ex-158]<3>; Ex-168$<1>;

70.1 3:17,1.1 Autograph;

70.2 3:17,1.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [L019\*%]<6>; [P025\*%]<3>; [0289%]<2>; [6]<6>; [33\*]<5>; [81\*%]<3>; [614\*]<5>; [1175\*%]<3>; [1175^c%]<3>; [2464\*%]<3>; [vg^b]<3>; [l^249]<4>; [Ir%]<3>; Ex-168$<1>;

71.1 3:17,2.1 Autograph;

71.2 3:17,2.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Ir%]<3>; [Ex-157]<3>; Ex-168$<1>;

72.1 3:18,1.1 Autograph;

72.2 3:18,1.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; Ex-168$<1>;

73.1 3:20,1.1 Autograph;

73.2 3:20,1.2 [33\*]<5>; [630%]<6>; [1506%]<5>; [vg^b]<3>; [it-ar]<5>; [bo^b%]<2>; [Epiph^b%]<3>; [McionE%]<5>; Ex-168$<1>;

74.1 4:2,1.1 [6]<6>; [sy^h%]<4>; [sy^p%]<6>; Autograph;

74.2 4:2,1.2 [Ex-150]<5>; [Ex-151]<3>; Ex-169$<1>;

75.1 4:2,2.1 [0289%]<2>; [NA-27]<2>; [sa^a%]<2>; [sa^b%]<2>; [bo^a%]<2>; [bo^b%]<2>; [Ex-158]<3>; Autograph;

75.2 4:2,2.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [6]<6>; Ex-165#<1>;

76.1 4:5,1.1 Autograph;

76.2 4:5,1.2 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-168$<1>;

77.1 4:6,1.1 [sy^h%]<4>; Autograph;

77.2 4:6,1.2 [Ex-151]<3>; Ex-166#<1>;

78.1 4:6,2.1 [044\*]<3>; Autograph;

78.2 4:6,2.2 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [0285%]<2>; [33\*]<5>; [vg^b]<3>; Ex-155#<1>;

79.1 4:9,1.1 [l^249]<4>; [l^846]<5>; [Ex-148]<5>; Autograph;

79.2 4:9,1.2 [D06^1]<2>; [945]<6>; [vg^cl]<4>; [Ex-155#]<1>; [Ex-169$]<1>; Ex-172$<1>;

80.1 4:10,1.1 Autograph;

80.2 4:10,1.2 P^11%<4>;

81.1 4:11,1.1 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [630%]<6>; [1881^c]<7>; Autograph;

81.2 4:11,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [Cl^a%]<3>; [Cl^b%]<3>; [Ex-149]<4>; [Ex-153]<4>; Ex-169$<1>;

82.1 4:13,1.1 [l^249]<4>; [l^846]<5>; [Cl^a%]<3>; [Cl^b%]<3>; [Eus^a%]<3>; [Eus^b%]<3>; Autograph;

82.2 4:13,1.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Ex-150]<5>; [Ex-155#]<1>; [Ex-158]<3>; [Ex-169$]<1>; Ex-172$<1>;

83.1 4:13,2.1 Autograph;

83.2 4:13,2.2 [G012\*]<5>; [G012^c]<5>; Ex-168$<1>;

84.1 4:14,1.1 [01^c%]<2>; [01^2]<2>; [NA-27]<2>; [l^249]<4>; [Ex-148]<5>; [Ex-161]<2>; Ex-168$<1>;

84.2 4:14,1.2 [Ex-147]<6>; Autograph;

85.1 4:15,1.1 Autograph;

85.2 4:15,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [it-g%]<2>; Ex-168$<1>;

86.1 4:15,2.1 Autograph;

86.2 4:15,2.2 [1506%]<5>; [Cl^b%]<3>; [Ex-158]<3>; Ex-168$<1>;

87.1 4:16,1.1 Autograph;

87.2 4:16,1.2 [104\*%]<3>; [614\*]<5>; [629]<5>; [vg^cl]<4>; [it-ar]<5>; Ex-168$<1>;

88.1 4:17,1.1 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [Ex-150]<5>; Autograph;

88.2 4:17,1.2 Ex-161<2>;

89.1 4:17,2.1 [629]<5>; [vg^cl]<4>; [sy^h%]<4>; [Ex-148]<5>; Autograph;

89.2 4:17,2.2 [945]<6>; [vg^st]<4>; [it-b\*]<5>; [sa^a%]<2>; [Ex-152]<2>; [Ex-157]<3>; [Ex-158]<3>; Ex-169$<1>;

89.3 4:17,2.3 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-170$<1>;

90.1 5:1,1.1 [D06^2]<4>; [6]<6>; Autograph;

90.2 5:1,1.2 [vg^b]<3>; [Ex-147]<6>; Ex-155#<1>;

91.1 5:2,1.1 P^61%<3>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

91.2 5:2,1.2 Did^a%<3>; Ex-152<2>;

92.1 5:2,2.1 [326]<5>; Did^a%<3>; Autograph;

92.2 5:2,2.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Ex-150]<5>; [Ex-152]<2>; [Ex-164]<2>; Ex-168$<1>;

93.1 5:3,1.1 [D06\*]<5>; [6]<6>; [it-ar]<5>; Autograph;

93.2 5:3,1.2 [D06^1]<2>; [Lcf%]<4>; [Ex-152]<2>; [Ex-160]<3>; Ex-169$<1>;

94.1 5:4,1.1 Autograph;

94.2 5:4,1.2 [1505\*%]<3>; [Ex-152]<2>; [Ex-157]<3>; Ex-168$<1>;

94.3 5:4,1.3 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [33\*]<5>; [81\*%]<3>; [sa^a%]<2>; [sa^b%]<2>; [bo^a%]<2>; [bo^b%]<2>; [Ambst%]<5>; [Ex-147]<6>; [Ex-151]<3>; [Ex-163]<2>; Ex-169$<1>;

94.4 5:4,1.4 [01\*]<4>; [01^c%]<2>; [01^1%]<4>; [01^2]<2>; [it-ar]<5>; Ex-170$<1>;

95.1 5:4,2.1 [365%]<5>; Autograph;

95.2 5:4,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [P025\*%]<3>; [044\*]<3>; [629]<5>; [1505\*%]<3>; [vg^st]<4>; [sy^h%]<4>; Ex-168$<1>;

95.3 5:4,2.3 Ex-153<4>;

96.1 5:5,1.1 Epiph^a%<3>; [Epiph^b%]<3>; [Tert%]<4>; Autograph;

96.2 5:5,1.2 P^61%<3>; [01\*]<4>; [01^1%]<4>; [vg^st]<4>; [Ex-155#]<1>; [Ex-169$]<1>; Ex-172$<1>;

96.3 5:5,1.3 [D06^2]<4>; Ex-166#<1>;

96.4 5:5,1.4 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [P025\*%]<3>; [33\*]<5>; [104\*%]<3>; [365%]<5>; [vg^cl]<4>; [it-ar]<5>; [sa^a%]<2>; [sa^b%]<2>; [bo^a%]<2>; [bo^b%]<2>; [sy^p%]<6>; [Ex-147]<6>; [Ex-157]<3>; Ex-168$<1>;

97.1 5:6,1.1 Autograph;

97.2 5:6,1.2 [Ambst%]<5>; [Lcf%]<4>; Ex-168$<1>;

98.1 5:6,2.1 Autograph;

98.2 5:6,2.2 D06\*<5>;

98.3 5:6,2.3 Irlat^a%<3>;

99.1 5:7,1.1 [D06^2]<4>; [614\*]<5>; [629]<5>; [HF]<5>; [RP]<5>; [sy^p%]<6>; Autograph;

99.2 5:7,1.2 [P^11%]<4>; [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [048%]<2>; [vg^b]<3>; [it-ar]<5>; [Ex-153]<4>; [Ex-155#]<1>; [Ex-168$]<1>; Ex-172$<1>;

100.1 5:7,2.1 [D06^2]<4>; Autograph;

100.2 5:7,2.2 [C^3%]<4>; [sa^a%]<2>; [Ex-147]<6>; Ex-155#<1>;

101.1 5:8,1.1 Autograph;

101.2 5:8,1.2 Ex-158<3>;

101.3 5:8,1.3 Ex-150<5>;

102.1 5:8,2.1 Autograph;

102.2 5:8,2.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-168$<1>;

103.1 5:9,1.1 Autograph;

103.2 5:9,1.2 D06^1<2>;

104.1 5:10,1.1 Autograph;

104.2 5:10,1.2 [D06^1]<2>; [vg^b]<3>; Ex-155#<1>;

105.1 5:10,2.1 [P^61%]<3>; [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [it-d]<4>; [Ex-165#]<1>; [Ex-168$]<1>; Ex-172$<1>;

105.2 5:10,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [sa^a%]<2>; [sa^b%]<2>; [bo^a%]<2>; [bo^b%]<2>; [Ex-147]<6>; Autograph;

106.1 5:10,3.1 [D06^2]<4>; [L019\*%]<6>; [sy^h%]<4>; [sy^p%]<6>; Autograph;

106.2 5:10,3.2 [B^2]<4>; [P025\*%]<3>; [81\*%]<3>; [1505\*%]<3>; [Ex-152]<2>; [Ex-153]<4>; Ex-169$<1>;

107.1 5:11,1.1 [01^1%]<4>; [D06^2]<4>; [L019\*%]<6>; [630%]<6>; [RP]<5>; [sy^h%]<4>; [sy^p%]<6>; Autograph;

107.2 5:11,1.2 [D06\*]<5>; [104\*%]<3>; [Ex-151]<3>; [Ex-154]<3>; Ex-169$<1>;

108.1 5:11,2.1 [048%]<2>; [81\*%]<3>; [1175\*%]<3>; [1175^c%]<3>; [1505\*%]<3>; [2464\*%]<3>; [NA-27]<2>; [sa^a%]<2>; [sa^b%]<2>; [bo^a%]<2>; [bo^b%]<2>; [Ex-150]<5>; [Ex-158]<3>; Autograph;

108.2 5:11,2.2 [01^c%]<2>; [01^2]<2>; [B^2]<4>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [L019\*%]<6>; [6]<6>; [614\*]<5>; [it-f\*]<3>; [Ex-147]<6>; [Ex-165#]<1>; [Ex-169$]<1>; Ex-172$<1>;

109.1 5:12,1.1 [6]<6>; [sy^p%]<6>; Autograph;

109.2 5:12,1.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [Ex-152]<2>; Ex-169$<1>;

110.1 5:12,2.1 Autograph;

110.2 5:12,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [sy^p%]<6>; Ex-168$<1>;

111.1 5:13,1.1 Autograph;

111.2 5:13,1.2 [L019\*%]<6>; [044\*]<3>; [629]<5>; [2464\*%]<3>; [it-d]<4>; Ex-168$<1>;

112.1 5:13,2.1 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

112.2 5:13,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [6]<6>; [Ex-150]<5>; Ex-168$<1>;

112.3 5:13,2.3 Ex-151<3>;

113.1 6:1,1.1 Autograph;

113.2 6:1,1.2 [P025\*%]<3>; [33\*]<5>; [104\*%]<3>; [365%]<5>; [1881\*]<7>; [Ex-157]<3>; Ex-168$<1>;

114.1 6:2,1.1 [365%]<5>; [630%]<6>; [sy^h%]<4>; [sy^p%]<6>; Autograph;

114.2 6:2,1.2 [Cyp^a%]<5>; [Ex-151]<3>; [Ex-153]<4>; Ex-169$<1>;

115.1 6:2,2.1 [104\*%]<3>; [NA-27]<2>; [it-g%]<2>; [sa^a%]<2>; [sa^b%]<2>; [bo^a%]<2>; [bo^b%]<2>; [Ex-153]<4>; [Ex-158]<3>; Autograph;

115.2 6:2,2.2 [01^c%]<2>; [01^2]<2>; [B^2]<4>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Ex-147]<6>; [Ex-165#]<1>; [Ex-169$]<1>; Ex-172$<1>;

116.1 6:5,1.1 Autograph;

116.2 6:5,1.2 Ex-158<3>;

117.1 6:5,2.1 Autograph;

117.2 6:5,2.2 [P^11%]<4>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [6]<6>; [104\*%]<3>; [365%]<5>; [TR]<5>; [Ex-150]<5>; Ex-168$<1>;

118.1 6:5,3.1 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

118.2 6:5,3.2 [P^11%]<4>; [D06\*]<5>; [6]<6>; [Ex-147]<6>; Ex-168$<1>;

118.3 6:5,3.3 Ex-151<3>;

119.1 6:5,4.1 Autograph;

119.2 6:5,4.2 [vg^b]<3>; [it-f\*]<3>; [it-g%]<2>; [bo^b%]<2>; [sy^p%]<6>; Ex-168$<1>;

120.1 6:7,1.1 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [D06^1]<2>; Autograph;

120.2 6:7,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [D06\*]<5>; [6]<6>; [1505\*%]<3>; [Ex-154]<3>; Ex-169$<1>;

121.1 6:7,2.1 Autograph;

121.2 6:7,2.2 [01\*]<4>; [01^c%]<2>; [01^1%]<4>; [01^2]<2>; [629]<5>; [sy^p%]<6>; [Ex-147]<6>; Ex-168$<1>;

122.1 6:8,1.1 [D06^2]<4>; Autograph;

122.2 6:8,1.2 Ex-151<3>;

123.1 6:10,1.1 [Cl^a%]<3>; [Cl^b%]<3>; [Spec%]<5>; Autograph;

123.2 6:10,1.2 [Ex-151]<3>; [Ex-164]<2>; Ex-166#<1>;

124.1 6:10,2.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [6]<6>; [630%]<6>; [1739\*]<6>; [sy^h%]<4>; Autograph;

124.2 6:10,2.2 [Cl^a%]<3>; [Cl^b%]<3>; [Irarm%]<4>; [Ex-150]<5>; [Ex-151]<3>; Ex-169$<1>;

125.1 6:11,1.1 [P^11%]<4>; [D06\*]<5>; [Ambst%]<5>; [Cyp^a%]<5>; [Irlat^a%]<3>; [Tert%]<4>; Autograph;

125.2 6:11,1.2 [sa^a%]<2>; [Ex-152]<2>; [Ex-157]<3>; Ex-169$<1>;

125.3 6:11,1.3 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [P025\*%]<3>; [81\*%]<3>; [104\*%]<3>; [629]<5>; [2464\*%]<3>; [bo^a%]<2>; [bo^b%]<2>; [sy^p%]<6>; [Ex-153]<4>; [Ex-158]<3>; Ex-166#<1>;

126.1 6:14,1.1 [P^46^1]<3>; [Ambst%]<5>; [Ex-147]<6>; [Ex-159]<3>; Autograph;

126.2 6:14,1.2 [6]<6>; [it-g%]<2>; [it-t%]<2>; [Ex-150]<5>; [Ex-164]<2>; Ex-166#<1>;

126.3 6:14,1.3 [P^46\*]<3>; [D06\*]<5>; [P025\*%]<3>; [Ex-157]<3>; Ex-169$<1>;

127.1 6:15,1.1 Autograph;

127.2 6:15,1.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [it-ar]<5>; [Meth%]<4>; [Ex-168$]<1>; Ex-172$<1>;

128.1 6:15,2.1 [P^11%]<4>; [01^1%]<4>; [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [P025\*%]<3>; [81\*%]<3>; [104\*%]<3>; [1175\*%]<3>; [1175^c%]<3>; [1505\*%]<3>; [2464\*%]<3>; [Ex-153]<4>; Autograph;

128.2 6:15,2.2 Ex-161<2>;

129.1 6:15,3.1 Autograph;

129.2 6:15,3.2 [P025\*%]<3>; [044\*]<3>; [81\*%]<3>; [104\*%]<3>; [630%]<6>; [1175\*%]<3>; [1175^c%]<3>; [1739^c]<6>; [2495]<6>; [pm^b]<5>; Ex-168$<1>;

129.3 6:15,3.3 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-169$<1>;

130.1 6:16,1.1 Autograph;

130.2 6:16,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [K\*%]<2>; [L019\*%]<6>; [044\*]<3>; [6]<6>; [pm^b]<5>; [HF]<5>; [RP]<5>; [it-r%]<3>; [sy^h%]<4>; [Spec%]<5>; Ex-168$<1>;

131.1 6:19,1.1 Autograph;

131.2 6:19,1.2 [A^c]<4>; [L019\*%]<6>; [044\*]<3>; [33\*]<5>; [81\*%]<3>; [104\*%]<3>; [365%]<5>; [1175\*%]<3>; [1175^c%]<3>; [1505\*%]<3>; [2464\*%]<3>; [pm^b]<5>; [bo^a%]<2>; [sy^h%]<4>; [Ambst%]<5>; [Meth%]<4>; [Ex-147]<6>; Ex-168$<1>;

132.1 6:19,2.1 Autograph;

132.2 6:19,2.2 [629]<5>; [Ex-158]<3>; Ex-168$<1>;

133.1 6:20,1.1 [vg^st]<4>; Autograph;

133.2 6:20,1.2 [1505\*%]<3>; [1611]<5>; [Ex-163]<2>; Ex-168$<1>;

133.3 6:20,1.3 [01\*]<4>; [2495]<6>; [it-d]<4>; [Irlat^a%]<3>; Ex-169$<1>;

134.1 6:20,2.1 [6]<6>; [1739\*]<6>; Autograph;

134.2 6:20,2.2 [C^3%]<4>; [vg^b]<3>; [Ex-150]<5>; [Ex-152]<2>; Ex-169$<1>;

135.1 7:1,1.1 vg^st<4>; [it-r%]<3>; Autograph;

135.2 7:1,1.2 [vg^cl]<4>; [sa^a%]<2>; [sa^b%]<2>; [bo^a%]<2>; [bo^b%]<2>; [Ex-152]<2>; [Ex-157]<3>; Ex-166#<1>;

136.1 7:2,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; Autograph;

136.2 7:2,1.2 [sy^h%]<4>; [sy^p%]<6>; Ex-166#<1>;

137.1 7:2,2.1 Autograph;

137.2 7:2,2.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-168$<1>;

138.1 7:3,1.1 [D06^2]<4>; [6]<6>; Autograph;

138.2 7:3,1.2 Ex-151<3>;

139.1 7:5,1.1 Autograph;

139.2 7:5,1.2 [it-r%]<3>; [Cl^a%]<3>; [Cl^b%]<3>; [Ex-164]<2>; Ex-168$<1>;

140.1 7:5,2.1 [D06^2]<4>; [044\*]<3>; [6]<6>; Autograph;

140.2 7:5,2.2 Ex-155#<1>;

141.1 7:5,3.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [it-b\*]<5>; [it-r%]<3>; Autograph;

141.2 7:5,3.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [Ex-152]<2>; [Ex-166#]<1>; [Ex-168$]<1>; Ex-172$<1>;

142.1 7:5,4.1 Autograph;

142.2 7:5,4.2 Ex-158<3>;

143.1 7:7,1.1 [326]<5>; [629]<5>; [vg^st]<4>; [it-t%]<2>; Autograph;

143.2 7:7,1.2 [vg^cl]<4>; [Ex-150]<5>; [Ex-155#]<1>; [Ex-158]<3>; [Ex-169$]<1>; Ex-172$<1>;

144.1 7:7,2.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [6]<6>; [Cl^a%]<3>; [Cl^b%]<3>; Autograph;

144.2 7:7,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [Ex-155#]<1>; [Ex-169$]<1>; Ex-172$<1>;

145.1 7:7,3.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [6]<6>; [Cl^a%]<3>; [Cl^b%]<3>; Autograph;

145.2 7:7,3.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [Ex-155#]<1>; [Ex-169$]<1>; Ex-172$<1>;

146.1 7:9,1.1 [C^2%]<4>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Ex-150]<5>; Autograph;

146.2 7:9,1.2 [945]<6>; [Ex-161]<2>; Ex-169$<1>;

147.1 7:10,1.1 [Cl^a%]<3>; [Cl^b%]<3>; [Epiph^a%]<3>; [Epiph^b%]<3>; Autograph;

147.2 7:10,1.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [1505\*%]<3>; [Ex-147]<6>; [Ex-157]<3>; Ex-168$<1>;

147.3 7:10,1.3 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [614\*]<5>; Ex-169$<1>;

148.1 7:13,1.1 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [01\*]<4>; [01^1%]<4>; [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [P025\*%]<3>; [1505\*%]<3>; [NA-27]<2>; [sa^a%]<2>; Autograph;

148.2 7:13,1.2 [Ex-152]<2>; [Ex-165#]<1>; [Ex-168$]<1>; Ex-172$<1>;

149.1 7:13,2.1 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

149.2 7:13,2.2 Ex-152<2>;

150.1 7:13,3.1 Autograph;

150.2 7:13,3.2 [81\*%]<3>; [1881\*]<7>; [2464\*%]<3>; [Ex-164]<2>; Ex-168$<1>;

151.1 7:13,4.1 [D06^2]<4>; [sy^p%]<6>; Autograph;

151.2 7:13,4.2 [Tert%]<4>; [Ex-147]<6>; [Ex-155#]<1>; [Ex-168$]<1>; Ex-172$<1>;

152.1 7:14,1.1 Autograph;

152.2 7:14,1.2 [D06^2]<4>; [629]<5>; [sy^p%]<6>; Ex-166#<1>;

153.1 7:14,2.1 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [044\*]<3>; Autograph;

153.2 7:14,2.2 [Ex-147]<6>; Ex-155#<1>;

153.3 7:14,2.3 [629]<5>; [sy^p%]<6>; Ex-166#<1>;

154.1 7:15,1.1 [K\*%]<2>; [326]<5>; [NA-27]<2>; [bo^a%]<2>; [bo^b%]<2>; [Ex-161]<2>; Ex-168$<1>;

154.2 7:15,1.2 [Ex-153]<4>; Autograph;

155.1 7:17,1.1 Autograph;

155.2 7:17,1.2 [323\*]<5>; [614\*]<5>; Ex-168$<1>;

156.1 7:17,2.1 [P^46\*]<3>; [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [33\*]<5>; [NA-27]<2>; [Ex-147]<6>; [Ex-157]<3>; Autograph;

156.2 7:17,2.2 Ex-165#<1>;

157.1 7:17,3.1 [D06^2]<4>; [sy^p%]<6>; Autograph;

157.2 7:17,3.2 Ex-151<3>;

157.3 7:17,3.3 [044\*]<3>; [629]<5>; [vg^b]<3>; [Ex-147]<6>; Ex-169$<1>;

158.1 7:17,4.1 [D06^2]<4>; [sy^p%]<6>; Autograph;

158.2 7:17,4.2 Ex-151<3>;

158.3 7:17,4.3 [044\*]<3>; [629]<5>; [vg^b]<3>; [Ex-147]<6>; Ex-169$<1>;

159.1 7:17,5.1 [D06^c%]<3>; [D06^1]<2>; Autograph;

159.2 7:17,5.2 Ex-166#<1>;

160.1 7:18,1.1 Autograph;

160.2 7:18,1.2 [P^15%]<2>; [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [044\*]<3>; [Ex-147]<6>; Ex-168$<1>;

160.3 7:18,1.3 Ex-151<3>;

161.1 7:20,1.1 Autograph;

161.2 7:20,1.2 [P^15%]<2>; [1739^c]<6>; [it-ar]<5>; [Ambst%]<5>; Ex-168$<1>;

162.1 7:21,1.1 Autograph;

162.2 7:21,1.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [it-ar]<5>; Ex-168$<1>;

163.1 7:22,1.1 [it-r%]<3>; [Ex-159]<3>; Autograph;

163.2 7:22,1.2 [Ex-151]<3>; Ex-166#<1>;

163.3 7:22,1.3 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [1505\*%]<3>; Ex-169$<1>;

164.1 7:24,1.1 Autograph;

164.2 7:24,1.2 309<5>;

165.1 7:28,1.1 Autograph;

165.2 7:28,1.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [sy^p%]<6>; Ex-168$<1>;

166.1 7:28,2.1 Autograph;

166.2 7:28,2.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Ex-158]<3>; Ex-168$<1>;

167.1 7:29,1.1 Autograph;

167.2 7:29,1.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [044\*]<3>; [104\*%]<3>; Ex-168$<1>;

168.1 7:29,2.1 Autograph;

168.2 7:29,2.2 [P^15%]<2>; [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Did^a%]<3>; Ex-168$<1>;

169.1 7:31,1.1 Autograph;

169.2 7:31,1.2 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [33\*]<5>; [81\*%]<3>; [1739\*]<6>; [sa^a%]<2>; Ex-168$<1>;

169.3 7:31,1.3 [D06^1]<2>; [Eus^a%]<3>; [Eus^b%]<3>; [Ex-150]<5>; Ex-155#<1>;

170.1 7:31,2.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

170.2 7:31,2.2 L019\*%<6>;

170.3 7:31,2.3 [044\*]<3>; Ex-166#<1>;

171.1 7:32,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; Autograph;

171.2 7:32,1.2 Ex-166#<1>;

172.1 7:34,1.1 [6]<6>; [HF]<5>; [RP]<5>; [sy^h%]<4>; Autograph;

172.2 7:34,1.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Ex-152]<2>; Ex-169$<1>;

172.3 7:34,1.3 sy^p%<6>;

172.4 7:34,1.4 [D06\*]<5>; [629]<5>; [it-f\*]<3>; [Ex-168$]<1>; [Ex-170$]<1>; Ex-172$<1>;

173.1 7:34,2.1 [P^15%]<2>; [P025\*%]<3>; [6]<6>; [104\*%]<3>; [365%]<5>; [1175\*%]<3>; [1175^c%]<3>; [1505\*%]<3>; [NA-27]<2>; [it-t%]<2>; [sa^a%]<2>; [sa^b%]<2>; [bo^a%]<2>; [bo^b%]<2>; [Ex-158]<3>; [Ex-166#]<1>; [Ex-169$]<1>; Ex-172$<1>;

173.2 7:34,2.2 it-f\*<3>;

173.3 7:34,2.3 [D06^c%]<3>; [D06^1]<2>; [Ex-152]<2>; [Ex-160]<3>; Ex-168$<1>;

173.4 7:34,2.4 Autograph;

174.1 7:34,3.1 Autograph;

174.2 7:34,3.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [P025\*%]<3>; [33\*]<5>; [629]<5>; [1175\*%]<3>; [1175^c%]<3>; [1505\*%]<3>; [TR]<5>; [vg^cl]<4>; [it-ar]<5>; [it-t%]<2>; [sy^p%]<6>; [Epiph^a%]<3>; [Epiph^b%]<3>; [Ex-157]<3>; Ex-168$<1>;

175.1 7:34,4.1 Autograph;

175.2 7:34,4.2 [Tert%]<4>; [Ex-158]<3>; Ex-168$<1>;

176.1 7:35,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

176.2 7:35,1.2 [P^15%]<2>; [Ex-166#]<1>; [Ex-168$]<1>; Ex-172$<1>;

177.1 7:35,2.1 Autograph;

177.2 7:35,2.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Eus^a%]<3>; [Eus^b%]<3>; [Ex-150]<5>; Ex-155#<1>;

178.1 7:35,3.1 Autograph;

178.2 7:35,3.2 P^15%<2>;

179.1 7:36,1.1 Autograph;

179.2 7:36,1.2 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [1505\*%]<3>; [vg^st]<4>; [it-d]<4>; [sy^p%]<6>; Ex-168$<1>;

180.1 7:37,1.1 [D06\*]<5>; [D06^2]<4>; [it-ar]<5>; Autograph;

180.2 7:37,1.2 [1505\*%]<3>; [Ex-147]<6>; Ex-155#<1>;

180.3 7:37,1.3 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [Ex-160]<3>; Ex-169$<1>;

181.1 7:37,2.1 Autograph;

181.2 7:37,2.2 P^15%<2>;

182.1 7:38,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Cl^a%]<3>; [Cl^b%]<3>; Autograph;

182.2 7:38,1.2 Ex-155#<1>;

183.1 7:38,2.1 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [sy^p%]<6>; Autograph;

183.2 7:38,2.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [629]<5>; [Cl^a%]<3>; [Cl^b%]<3>; [Ex-164]<2>; Ex-168$<1>;

183.3 7:38,2.3 Ex-152<2>;

184.1 7:38,3.1 [630%]<6>; Autograph;

184.2 7:38,3.2 [P^15%]<2>; [6]<6>; [Ex-150]<5>; [Ex-164]<2>; Ex-168$<1>;

185.1 7:38,4.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Cl^a%]<3>; [Cl^b%]<3>; Autograph;

185.2 7:38,4.2 Ex-155#<1>;

186.1 7:39,1.1 [6]<6>; Autograph;

186.2 7:39,1.2 [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [vg^cl]<4>; [it-ar]<5>; [Ambst%]<5>; [Epiph^a%]<3>; [Epiph^b%]<3>; Ex-155#<1>;

186.3 7:39,1.3 [K\*%]<2>; [bo^a%]<2>; [bo^b%]<2>; Ex-168$<1>;

187.1 7:39,2.1 [365%]<5>; [630%]<6>; [TR]<5>; [sy^p%]<6>; Autograph;

187.2 7:39,2.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [1505\*%]<3>; [Ex-152]<2>; [Ex-153]<4>; Ex-169$<1>;

188.1 7:39,3.1 Autograph;

188.2 7:39,3.2 [Cl^a%]<3>; [Cl^b%]<3>; [Epiph^a%]<3>; [Epiph^b%]<3>; [Ex-157]<3>; Ex-168$<1>;

189.1 7:40,1.1 Autograph;

189.2 7:40,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [Cl^a%]<3>; [Cl^b%]<3>; Ex-168$<1>;

190.1 7:40,2.1 Autograph;

190.2 7:40,2.2 [6]<6>; [104\*%]<3>; [2464\*%]<3>; [it-t%]<2>; [sy^h%]<4>; [Ex-153]<4>; [Ex-158]<3>; Ex-168$<1>;

191.1 7:40,3.1 Autograph;

191.2 7:40,3.2 [P^15%]<2>; [33\*]<5>; Ex-168$<1>;

192.1 7:40,4.1 [D06\*]<5>; [it-ar]<5>; Autograph;

192.2 7:40,4.2 [Tert%]<4>; [Ex-160]<3>; Ex-169$<1>;

193.1 8:1,1.1 Autograph;

193.2 8:1,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [vg^b]<3>; [it-ar]<5>; [sy^p%]<6>; Ex-168$<1>;

194.1 8:2,1.1 vg^st<4>; [Ambst%]<5>; [Cl^a%]<3>; [Cl^b%]<3>; [Cyp^a%]<5>; Autograph;

194.2 8:2,1.2 D06\*<5>; D06^c%<3>; D06^1<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [vg^cl]<4>; Ex-151<3>;

195.1 8:2,2.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [365%]<5>; [630%]<6>; [sy^h%]<4>; [sy^p%]<6>; Autograph;

195.2 8:2,2.2 [K\*%]<2>; [1505\*%]<3>; [Ex-151]<3>; [Ex-153]<4>; [Ex-166#]<1>; [Ex-168$]<1>; Ex-172$<1>;

195.3 8:2,2.3 326<5>;

196.1 8:2,3.1 Autograph;

196.2 8:2,3.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [Ambst%]<5>; Ex-168$<1>;

197.1 8:2,4.1 [Cl^a%]<3>; [Cl^b%]<3>; Autograph;

197.2 8:2,4.2 D06\*<5>; F\*<5>; G012\*<5>; G012^c<5>; 044\*<3>;

197.3 8:2,4.3 Ex-151<3>;

198.1 8:3,1.1 Autograph;

198.2 8:3,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [Cl^a%]<3>; [Cl^b%]<3>; Ex-168$<1>;

199.1 8:3,2.1 [01^1%]<4>; [365%]<5>; [Ex-150]<5>; Autograph;

199.2 8:3,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [Cl^a%]<3>; [Cl^b%]<3>; [Ex-154]<3>; Ex-169$<1>;

200.1 8:4,1.1 [D06^2]<4>; [044\*]<3>; [6]<6>; Autograph;

200.2 8:4,1.2 Ex-155#<1>;

201.1 8:6,1.1 Autograph;

201.2 8:6,1.2 [33\*]<5>; [it-b\*]<5>; [sa^a%]<2>; [Irlat^a%]<3>; [Ex-164]<2>; Ex-168$<1>;

202.1 8:6,2.1 Autograph;

202.2 8:6,2.2 Ex-158<3>;

203.1 8:6,3.1 Autograph;

203.2 8:6,3.2 [630%]<6>; [Ex-147]<6>; Ex-168$<1>;

204.1 8:7,1.1 [044\*]<3>; [vg^b]<3>; Ex-165#<1>;

204.2 8:7,1.2 Autograph;

205.1 8:7,2.1 Autograph;

205.2 8:7,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [629]<5>; [Cl^a%]<3>; [Cl^b%]<3>; [Ex-147]<6>; Ex-168$<1>;

206.1 8:8,1.1 [01^1%]<4>; [Ex-150]<5>; Autograph;

206.2 8:8,1.2 [044\*]<3>; [1881\*]<7>; [Ex-154]<3>; Ex-169$<1>;

207.1 8:8,2.1 [6]<6>; [Cl^a%]<3>; [Cl^b%]<3>; Ex-165#<1>;

207.2 8:8,2.2 [Or^a%]<4>; [Ex-147]<6>; Autograph;

208.1 8:8,3.1 [81\*%]<3>; [NA-27]<2>; [vg^st]<4>; [sa^a%]<2>; [sa^b%]<2>; [bo^a%]<2>; [bo^b%]<2>; [Ex-150]<5>; [Ex-164]<2>; Ex-168$<1>;

208.2 8:8,3.2 [vg^cl]<4>; [Cl^a%]<3>; [Cl^b%]<3>; [Or^a%]<4>; [Or^b%]<3>; [Tert%]<4>; [Ex-147]<6>; Autograph;

208.3 8:8,3.3 A\*<4>;

209.1 8:10,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; Autograph;

209.2 8:10,1.2 [Ex-164]<2>; Ex-166#<1>;

210.1 8:11,1.1 [Cl^a%]<3>; [Cl^b%]<3>; Ex-165#<1>;

210.2 8:11,1.2 [P025\*%]<3>; [Ex-157]<3>; Ex-168$<1>;

210.3 8:11,1.3 [6]<6>; [81\*%]<3>; [104\*%]<3>; [365%]<5>; [Ex-150]<5>; Autograph;

210.4 8:11,1.4 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [sa^a%]<2>; [Ambst%]<5>; [Ex-151]<3>; [Ex-163]<2>; [Ex-169$]<1>; [Ex-170$]<1>; Ex-172$<1>;

211.1 8:11,2.1 [D06^2]<4>; Autograph;

211.2 8:11,2.2 [01^2]<2>; [P025\*%]<3>; [1175\*%]<3>; [1175^c%]<3>; [1505\*%]<3>; [sy^h%]<4>; [Ex-150]<5>; Ex-168$<1>;

211.3 8:11,2.3 [Ex-147]<6>; [Ex-152]<2>; Ex-169$<1>;

212.1 8:12,1.1 Autograph;

212.2 8:12,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-168$<1>;

213.1 8:13,1.1 Autograph;

213.2 8:13,1.2 [Cl^a%]<3>; [Cl^b%]<3>; [Ex-156]<4>; Ex-168$<1>;

214.1 8:13,2.1 Autograph;

214.2 8:13,2.2 [Cl^a%]<3>; [Cl^b%]<3>; [Ex-156]<4>; Ex-168$<1>;

215.1 9:1,1.1 [629]<5>; [sy^p%]<6>; Autograph;

215.2 9:1,1.2 [D06^1]<2>; [Ex-152]<2>; [Ex-162]<2>; Ex-169$<1>;

216.1 9:2,1.1 Autograph;

216.2 9:2,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Ex-147]<6>; [Ex-152]<2>; Ex-168$<1>;

217.1 9:5,1.1 [D06\*]<5>; Autograph;

217.2 9:5,1.2 [Tert%]<4>; [Ex-156]<4>; Ex-168$<1>;

218.1 9:7,1.1 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; vg^st<4>; [Pel%]<5>; Ex-165#<1>;

218.2 9:7,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [C^3%]<4>; [vg^cl]<4>; [it-g%]<2>; [bo^a%]<2>; [bo^b%]<2>; [Ex-147]<6>; Autograph;

219.1 9:7,2.1 [Ex-147]<6>; Autograph;

219.2 9:7,2.2 [C^2%]<4>; [D06^2]<4>; [044\*]<3>; [81\*%]<3>; [104\*%]<3>; [1175\*%]<3>; [1175^c%]<3>; [1505\*%]<3>; [2464\*%]<3>; [sa^a%]<2>; [sy^h%]<4>; [Ex-150]<5>; [Ex-158]<3>; Ex-166#<1>;

220.1 9:8,1.1 Autograph;

220.2 9:8,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [it-f\*]<3>; Ex-168$<1>;

220.3 9:8,1.3 [D06^2]<4>; Ex-166#<1>;

221.1 9:9,1.1 Autograph;

221.2 9:9,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [it-b\*]<5>; [Ambst%]<5>; Ex-168$<1>;

221.3 9:9,1.3 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-169$<1>;

222.1 9:9,2.1 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [NA-27]<2>; [Ex-144]<4>; [Ex-150]<5>; Ex-168$<1>;

222.2 9:9,2.2 [D06^1]<2>; [Epiph^a%]<3>; [Epiph^b%]<3>; [Ex-147]<6>; Autograph;

223.1 9:10,1.1 [sy^h%]<4>; [sy^p%]<6>; Autograph;

223.2 9:10,1.2 [D06^1]<2>; [104\*%]<3>; [Ex-147]<6>; [Ex-155#]<1>; [Ex-162]<2>; [Ex-169$]<1>; Ex-172$<1>;

224.1 9:12,1.1 [it-t%]<2>; [Ex-151]<3>; Autograph;

224.2 9:12,1.2 [01\*]<4>; [01^1%]<4>; [D06\*]<5>; [L019\*%]<6>; [81\*%]<3>; [614\*]<5>; [629]<5>; [1175\*%]<3>; [1175^c%]<3>; [1505\*%]<3>; [Ex-155#]<1>; [Ex-169$]<1>; Ex-172$<1>;

225.1 9:13,1.1 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [6]<6>; [it-ar]<5>; Autograph;

225.2 9:13,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [33\*]<5>; [Ex-147]<6>; [Ex-152]<2>; [Ex-157]<3>; [Ex-160]<3>; Ex-169$<1>;

226.1 9:13,2.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Eus^a%<3>; Eus^b%<3>; Autograph;

226.2 9:13,2.2 Ex-155#<1>;

227.1 9:15,1.1 [D06\*]<5>; [D06^c%]<3>; [it-b\*]<5>; [Ambst%]<5>; [Pel%]<5>; [Tert%]<4>; Ex-165#<1>;

227.2 9:15,1.2 [1175\*%]<3>; [1175^c%]<3>; [Ex-157]<3>; Ex-168$<1>;

227.3 9:15,1.3 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-169$<1>;

227.4 9:15,1.4 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; Autograph;

228.1 9:16,1.1 Autograph;

228.2 9:16,1.2 [01\*]<4>; [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-168$<1>;

229.1 9:16,2.1 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [D06\*]<5>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [945]<6>; [NA-27]<2>; [it-ar]<5>; [Ex-158]<3>; Ex-166#<1>;

229.2 9:16,2.2 [Ex-160]<3>; Autograph;

229.3 9:16,2.3 [P025\*%]<3>; [104\*%]<3>; [614\*]<5>; [1175\*%]<3>; [1175^c%]<3>; [Ex-147]<6>; [Ex-148]<5>; Ex-168$<1>;

230.1 9:17,1.1 Autograph;

230.2 9:17,1.2 1505\*%<3>;

231.1 9:18,1.1 [6]<6>; [sy^p%]<6>; Autograph;

231.2 9:18,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [Ex-147]<6>; [Ex-155#]<1>; [Ex-169$]<1>; Ex-172$<1>;

231.3 9:18,1.3 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-170$<1>;

232.1 9:18,2.1 Autograph;

232.2 9:18,2.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Ex-151]<3>; Ex-168$<1>;

233.1 9:20,1.1 [630%]<6>; [Ex-147]<6>; Autograph;

233.2 9:20,1.2 [F\*]<5>; [G012\*]<5>; [6]<6>; [326]<5>; [Cl^a%]<3>; [Cl^b%]<3>; [Ex-150]<5>; Ex-169$<1>;

234.1 9:20,2.1 [sy^h%]<4>; Autograph;

234.2 9:20,2.2 [Ex-147]<6>; [Ex-152]<2>; Ex-168$<1>;

235.1 9:21,1.1 [sy^h%]<4>; Autograph;

235.2 9:21,1.2 Ex-152<2>;

236.1 9:21,2.1 [sy^h%]<4>; Autograph;

236.2 9:21,2.2 Ex-152<2>;

237.1 9:21,3.1 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

237.2 9:21,3.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [Ex-155#]<1>; [Ex-168$]<1>; Ex-172$<1>;

238.1 9:21,4.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; Autograph;

238.2 9:21,4.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-155#<1>;

239.1 9:22,1.1 Autograph;

239.2 9:22,1.2 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [33\*]<5>; [vg^b]<3>; [sa^a%]<2>; [sa^b%]<2>; [bo^a%]<2>; [bo^b%]<2>; [Ex-147]<6>; Ex-155#<1>;

240.1 9:22,2.1 Autograph;

240.2 9:22,2.2 [D06^2]<4>; [33\*]<5>; Ex-166#<1>;

241.1 9:23,1.1 [D06^2]<4>; [6]<6>; Autograph;

241.2 9:23,1.2 Ex-152<2>;

242.1 9:25,1.1 Autograph;

242.2 9:25,1.2 [K\*%]<2>; [Cl^a%]<3>; [Cl^b%]<3>; Ex-168$<1>;

243.1 10:2,1.1 [D06^2]<4>; [630%]<6>; Autograph;

243.2 10:2,1.2 [Ex-150]<5>; [Ex-151]<3>; [Ex-164]<2>; Ex-169$<1>;

243.3 10:2,1.3 P^46\*<3>;

244.1 10:3,1.1 Autograph;

244.2 10:3,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [C\*%]<4>; [Ex-157]<3>; Ex-168$<1>;

244.3 10:3,1.3 01\*<4>;

245.1 10:4,1.1 Autograph;

245.2 10:4,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [Ex-157]<3>; Ex-168$<1>;

246.1 10:4,2.1 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [629]<5>; Autograph;

246.2 10:4,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [D06^1]<2>; [33\*]<5>; [Ex-147]<6>; [Ex-152]<2>; [Ex-157]<3>; Ex-168$<1>;

247.1 10:5,1.1 Autograph;

247.2 10:5,1.2 81\*%<3>;

248.1 10:8,1.1 [01\*]<4>; Autograph;

248.2 10:8,1.2 [D06^1]<2>; [vg^b]<3>; [Irlat^a%]<3>; Ex-155#<1>; [Ex-161]<2>;

249.1 10:8,2.1 Autograph;

249.2 10:8,2.2 [81\*%]<3>; [vg^b]<3>; [sy^h%]<4>; Ex-168$<1>;

250.1 10:9,1.1 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [NA-27]<2>; [sa^a%]<2>; [sa^b%]<2>; [bo^a%]<2>; [bo^b%]<2>; [Ex-150]<5>; Autograph;

250.2 10:9,1.2 [01^c%]<2>; [01^2]<2>; [326]<5>; [Ex-165#]<1>; [Ex-168$]<1>; Ex-172$<1>;

250.3 10:9,1.3 [81\*%]<3>; [Ex-157]<3>; Ex-169$<1>;

251.1 10:9,2.1 Autograph;

251.2 10:9,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [01^c%]<2>; [01^2]<2>; [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [P025\*%]<3>; [81\*%]<3>; [104\*%]<3>; [1175\*%]<3>; [1175^c%]<3>; [2464\*%]<3>; [Ex-154]<3>; Ex-168$<1>;

252.1 10:9,3.1 Autograph;

252.2 10:9,3.2 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Ex-152]<2>; [Ex-153]<4>; Ex-168$<1>;

253.1 10:10,1.1 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [Ex-150]<5>; Autograph;

253.2 10:10,1.2 [01^c%]<2>; [01^2]<2>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [bo^a%]<2>; [bo^b%]<2>; [Ex-154]<3>; Ex-169$<1>;

254.1 10:10,2.1 [01\*]<4>; [01^1%]<4>; [P025\*%]<3>; Autograph;

254.2 10:10,2.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [044\*]<3>; [6]<6>; [Ex-161]<2>; Ex-169$<1>;

254.3 10:10,2.3 Ex-151<3>;

255.1 10:11,1.1 [Epiph^a%]<3>; [Epiph^b%]<3>; [Ex-165#]<1>; [Ex-169$]<1>; Ex-172$<1>;

255.2 10:11,1.2 [01\*]<4>; [01^c%]<2>; [01^1%]<4>; [01^2]<2>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [81\*%]<3>; [Irarm%]<4>; [Irlat^a%]<3>; Ex-168$<1>;

255.3 10:11,1.3 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; Autograph;

256.1 10:11,2.1 Autograph;

256.2 10:11,2.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Ex-152]<2>; [Ex-157]<3>; Ex-168$<1>;

257.1 10:13,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; Autograph;

257.2 10:13,1.2 Ex-166#<1>;

258.1 10:13,2.1 Autograph;

258.2 10:13,2.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-168$<1>;

259.1 10:13,3.1 Autograph;

259.2 10:13,3.2 [1175\*%]<3>; [1175^c%]<3>; [Ex-158]<3>; Ex-168$<1>;

260.1 10:13,4.1 [D06\*]<5>; [D06^c%]<3>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [L019\*%]<6>; [6]<6>; Autograph;

260.2 10:13,4.2 Ex-155#<1>;

261.1 10:16,1.1 Autograph;

261.2 10:16,1.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [365%]<5>; [Irlat^b%]<4>; [Ex-168$]<1>; Ex-172$<1>;

262.1 10:16,2.1 [it-ar]<5>; Ex-165#<1>;

262.2 10:16,2.2 [Ex-154]<3>; Autograph;

263.1 10:17,1.1 [it-e%]<2>; [Ex-159]<3>; Autograph;

263.2 10:17,1.2 [D06^2]<4>; [629]<5>; [it-g%]<2>; [it-t%]<2>; Ex-166#<1>;

264.1 10:18,1.1 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [NA-27]<2>; [Ex-161]<2>; Ex-168$<1>;

264.2 10:18,1.2 [D06^1]<2>; [Ex-147]<6>; Autograph;

265.1 10:19,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; Autograph;

265.2 10:19,1.2 [D06^2]<4>; Ex-166#<1>;

266.1 10:19,2.1 [01^1%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [K\*%]<2>; [L019\*%]<6>; [P025\*%]<3>; [81\*%]<3>; [104\*%]<3>; [1175\*%]<3>; [1175^c%]<3>; [1505\*%]<3>; [2464\*%]<3>; [NA-27]<2>; [it-g%]<2>; [sa^a%]<2>; [sa^b%]<2>; [bo^a%]<2>; [bo^b%]<2>; [Ex-153]<4>; [Ex-158]<3>; Autograph;

266.2 10:19,2.2 [vg^b]<3>; [Ex-147]<6>; [Ex-148]<5>; [Ex-165#]<1>; [Ex-169$]<1>; Ex-172$<1>;

267.1 10:19,3.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; Autograph;

267.2 10:19,3.2 [D06^2]<4>; Ex-166#<1>;

268.1 10:20,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [NA-27]<2>; [Ambst%]<5>; [Spec%]<5>; [Ex-158]<3>; Ex-168$<1>;

268.2 10:20,1.2 Autograph;

269.1 10:20,2.1 Autograph;

269.2 10:20,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [104\*%]<3>; [1505\*%]<3>; [Ex-147]<6>; [Ex-151]<3>; [Ex-166#]<1>; [Ex-168$]<1>; Ex-172$<1>;

270.1 10:20,3.1 Autograph;

270.2 10:20,3.2 [D06\*]<5>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-168$<1>;

270.3 10:20,3.3 [Cl^a%]<3>; [Cl^b%]<3>; Ex-169$<1>;

271.1 10:23,1.1 [D06^2]<4>; Autograph;

271.2 10:23,1.2 [C^3%]<4>; [P025\*%]<3>; [1739\*]<6>; [vg^cl]<4>; Ex-155#<1>;

272.1 10:23,2.1 [D06^2]<4>; Autograph;

272.2 10:23,2.2 [C^3%]<4>; [P025\*%]<3>; [1739\*]<6>; [vg^cl]<4>; Ex-155#<1>;

273.1 10:24,1.1 [6]<6>; Autograph;

273.2 10:24,1.2 Ex-152<2>;

274.1 10:27,1.1 [D06^c%]<3>; [D06^1]<2>; [it-e%]<2>; [Ex-159]<3>; Autograph;

274.2 10:27,1.2 [it-g%]<2>; [it-t%]<2>; [sa^a%]<2>; Ex-166#<1>;

275.1 10:27,2.1 Autograph;

275.2 10:27,2.2 Ex-157<3>;

276.1 10:28,1.1 [1739\*]<6>; [it-b\*]<5>; [Ambst%]<5>; Autograph;

276.2 10:28,1.2 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [bo^a%]<2>; [bo^b%]<2>; [Ex-152]<2>; [Ex-153]<4>; Ex-166#<1>;

277.1 10:28,2.1 Autograph;

277.2 10:28,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-168$<1>;

278.1 10:28,3.1 [D06^2]<4>; [sy^p%]<6>; Autograph;

278.2 10:28,3.2 [C^3%]<4>; [H015^c%]<2>; [Ex-152]<2>; Ex-169$<1>;

279.1 10:29,1.1 [D06\*]<5>; Autograph;

279.2 10:29,1.2 [vg^b]<3>; [Ex-160]<3>; Ex-168$<1>;

280.1 10:31,1.1 Autograph;

280.2 10:31,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Spec%]<5>; Ex-168$<1>;

281.1 10:33,1.1 Ex-165#<1>;

281.2 10:33,1.2 [Ex-153]<4>; Autograph;

282.1 11:2,1.1 Autograph;

282.2 11:2,1.2 [33\*]<5>; [Ex-152]<2>; Ex-166#<1>;

283.1 11:2,2.1 [D06\*]<5>; [it-ar]<5>; Autograph;

283.2 11:2,2.2 Ex-160<3>;

284.1 11:3,1.1 [Cl^a%]<3>; [Cl^b%]<3>; Autograph;

284.2 11:3,1.2 D06\*<5>; F\*<5>; [G012\*]<5>; [G012^c]<5>; Ex-144<4>;

285.1 11:5,1.1 [L019\*%]<6>; [365%]<5>; [630%]<6>; [sy^h%]<4>; [sy^p%]<6>; Autograph;

285.2 11:5,1.2 [Ex-151]<3>; [Ex-153]<4>; [Ex-158]<3>; Ex-169$<1>;

286.1 11:9,1.1 Autograph;

286.2 11:9,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-168$<1>;

287.1 11:10,1.1 Autograph;

287.2 11:10,1.2 [vg^b]<3>; [bo^b%]<2>; [Ptol^Ir%]<3>; Ex-168$<1>;

288.1 11:14,1.1 [sy^h%]<4>; [sy^p%]<6>; Autograph;

288.2 11:14,1.2 [D06^1]<2>; [sa^a%]<2>; [Ex-151]<3>; Ex-169$<1>;

289.1 11:15,1.1 [TR]<5>; [sy^p%]<6>; Autograph;

289.2 11:15,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [D06^c%]<3>; [D06^1]<2>; [Ex-152]<2>; [Ex-160]<3>; Ex-169$<1>;

289.3 11:15,1.3 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [H015\*%]<2>; [H015^c%]<2>; [P025\*%]<3>; [1175\*%]<3>; [1175^c%]<3>; [1505\*%]<3>; [it-ar]<5>; [sy^h%]<4>; [Ex-150]<5>; [Ex-166#]<1>; [Ex-170$]<1>; Ex-172$<1>;

290.1 11:17,1.1 [01\*]<4>; [01^1%]<4>; [NA-27]<2>; [Ex-147]<6>; [Ex-155#]<1>; [Ex-160]<3>; [Ex-168$]<1>; Ex-172$<1>;

290.2 11:17,1.2 [6]<6>; [326]<5>; [Ambst%]<5>; Autograph;

290.3 11:17,1.3 Ex-164<2>;

290.4 11:17,1.4 [D06\*]<5>; [81\*%]<3>; [it-b\*]<5>; Ex-169$<1>;

291.1 11:17,2.1 [01\*]<4>; [01^1%]<4>; [NA-27]<2>; [Ex-147]<6>; [Ex-155#]<1>; [Ex-160]<3>; [Ex-168$]<1>; Ex-172$<1>;

291.2 11:17,2.2 [6]<6>; [326]<5>; [Ambst%]<5>; Autograph;

291.3 11:17,2.3 Ex-164<2>;

291.4 11:17,2.4 [D06\*]<5>; [81\*%]<3>; [it-b\*]<5>; Ex-169$<1>;

292.1 11:19,1.1 [D06^c%]<3>; [D06^1]<2>; Autograph;

292.2 11:19,1.2 Ex-166#<1>;

293.1 11:19,2.1 [D06\*]<5>; [6]<6>; [1175\*%]<3>; [1175^c%]<3>; [NA-27]<2>; [sa^a%]<2>; [bo^b%]<2>; [Ambst%]<5>; [Ex-153]<4>; [Ex-159]<3>; [Ex-164]<2>; Ex-168$<1>;

293.2 11:19,2.2 Autograph;

294.1 11:19,3.1 Autograph;

294.2 11:19,3.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [2464\*%]<3>; Ex-168$<1>;

295.1 11:20,1.1 Autograph;

295.2 11:20,1.2 33\*<5>;

295.3 11:20,1.3 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [it-b\*]<5>; Ex-168$<1>;

296.1 11:22,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [vg^b]<3>; Autograph;

296.2 11:22,1.2 [Ex-164]<2>; Ex-166#<1>;

297.1 11:22,2.1 Autograph;

297.2 11:22,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-168$<1>;

298.1 11:23,1.1 Autograph;

298.2 11:23,1.2 [D06^2]<4>; Ex-166#<1>;

298.3 11:23,1.3 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [365%]<5>; [it-d]<4>; Ex-168$<1>;

299.1 11:23,2.1 Autograph;

299.2 11:23,2.2 Ex-158<3>;

300.1 11:23,3.1 Autograph;

300.2 11:23,3.2 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-168$<1>;

301.1 11:24,1.1 [D06^2]<4>; [6]<6>; [vg^st]<4>; Autograph;

301.2 11:24,1.2 [C^3%]<4>; [vg^cl]<4>; [it-t%]<2>; [Ex-152]<2>; Ex-169$<1>;

302.1 11:24,2.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

302.2 11:24,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [Ex-166#]<1>; [Ex-168$]<1>; Ex-172$<1>;

303.1 11:24,3.1 Autograph;

303.2 11:24,3.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-168$<1>;

304.1 11:24,4.1 [6]<6>; [1739\*]<6>; [vg^st]<4>; [Cyp^a%]<5>; Autograph;

304.2 11:24,4.2 [C^3%]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Ex-150]<5>; Ex-155#<1>;

304.3 11:24,4.3 D06\*<5>;

304.4 11:24,4.4 [sa^a%]<2>; [sa^b%]<2>; [bo^a%]<2>; [bo^b%]<2>; Ex-169$<1>;

305.1 11:25,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

305.2 11:25,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [P025\*%]<3>; [33\*]<5>; [365%]<5>; [1175\*%]<3>; [1175^c%]<3>; [Ex-157]<3>; Ex-168$<1>;

306.1 11:26,1.1 Autograph;

306.2 11:26,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [C^3%]<4>; [D06^1]<2>; [1739^c]<6>; [it-ar]<5>; [bo^a%]<2>; [bo^b%]<2>; [Ex-155#]<1>; [Ex-168$]<1>; Ex-172$<1>;

307.1 11:27,1.1 [D06^2]<4>; [1739\*]<6>; [sy^h%]<4>; Autograph;

307.2 11:27,1.2 [I%]<4>; [vg^cl]<4>; [it-ar]<5>; [bo^a%]<2>; [bo^b%]<2>; [Ambst%]<5>; [Ex-150]<5>; [Ex-151]<3>; Ex-169$<1>;

308.1 11:27,2.1 Autograph;

308.2 11:27,2.2 [01\*]<4>; [01^c%]<2>; [01^1%]<4>; [01^2]<2>; [D06^2]<4>; [L019\*%]<6>; [326]<5>; [1505\*%]<3>; [sy^h%]<4>; [Ambst%]<5>; Ex-168$<1>;

309.1 11:29,1.1 [6]<6>; Ex-165#<1>;

309.2 11:29,1.2 [C^3%]<4>; [Ex-147]<6>; Autograph;

310.1 11:29,2.1 [6]<6>; vg^st<4>; [Pel%]<5>; Ex-165#<1>;

310.2 11:29,2.2 [C^3%]<4>; [1881^c]<7>; [vg^cl]<4>; [it-g%]<2>; Autograph;

311.1 11:31,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Cl^a%]<3>; [Cl^b%]<3>; Autograph;

311.2 11:31,1.2 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [Ex-147]<6>; Ex-155#<1>;

312.1 11:32,1.1 [TR]<5>; [Cl^a%]<3>; [Cl^b%]<3>; Autograph;

312.2 11:32,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Ex-150]<5>; [Ex-152]<2>; [Ex-157]<3>; Ex-168$<1>;

313.1 11:34,1.1 Autograph;

313.2 11:34,1.2 [vg^b]<3>; [it-b\*]<5>; [Cl^a%]<3>; [Cl^b%]<3>; [Ex-150]<5>; [Ex-155#]<1>; [Ex-168$]<1>; Ex-172$<1>;

314.1 12:2,1.1 [D06\*]<5>; Autograph;

314.2 12:2,1.2 [K\*%]<2>; [2464\*%]<3>; Ex-168$<1>;

314.3 12:2,1.3 [629]<5>; [TR]<5>; [vg^b]<3>; [sy^p%]<6>; [Ex-160]<3>; Ex-169$<1>;

315.1 12:2,2.1 [D06\*]<5>; Autograph;

315.2 12:2,2.2 Ex-156<4>;

316.1 12:2,3.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; Autograph;

316.2 12:2,3.2 [B^2]<4>; [F\*]<5>; [G012^c]<5>; Ex-169$<1>;

316.3 12:2,3.3 Ex-166#<1>;

317.1 12:3,1.1 Autograph;

317.2 12:3,1.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [it-ar]<5>; [Ambst%]<5>; [Spec%]<5>; Ex-168$<1>;

318.1 12:3,2.1 [6]<6>; [Did^a%]<3>; Autograph;

318.2 12:3,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [G012\*]<5>; [G012^c]<5>; [vg^b]<3>; [it-ar]<5>; [Ambst%]<5>; [Ex-152]<2>; Ex-169$<1>;

318.3 12:3,2.3 [629]<5>; Ex-166#<1>;

319.1 12:3,3.1 [6]<6>; Autograph;

319.2 12:3,3.2 [D06^c%]<3>; [D06^1]<2>; [vg^b]<3>; [Ex-152]<2>; [Ex-160]<3>; Ex-168$<1>;

320.1 12:6,1.1 [Ex-147]<6>; Autograph;

320.2 12:6,1.2 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [81\*%]<3>; [365%]<5>; [1175\*%]<3>; [1175^c%]<3>; [Ex-150]<5>; [Ex-164]<2>; Ex-168$<1>;

321.1 12:6,2.1 [D06^2]<4>; [044\*]<3>; [630%]<6>; [Ex-147]<6>; Autograph;

321.2 12:6,2.2 [Ex-150]<5>; [Ex-158]<3>; Ex-169$<1>;

321.3 12:6,2.3 [1175\*%]<3>; [1175^c%]<3>; [1505\*%]<3>; Ex-155#<1>;

322.1 12:9,1.1 [6]<6>; [sy^p%]<6>; Autograph;

322.2 12:9,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [33\*]<5>; [Ex-147]<6>; [Ex-155#]<1>; [Ex-157]<3>; [Ex-169$]<1>; Ex-172$<1>;

323.1 12:9,2.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

323.2 12:9,2.2 [2138]<5>; [Ex-166#]<1>; [Ex-168$]<1>; Ex-172$<1>;

324.1 12:9,3.1 [044\*]<3>; Autograph;

324.2 12:9,3.2 [01\*]<4>; [01^1%]<4>; [C^3%]<4>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [0201%]<3>; [Cl^a%]<3>; [Cl^b%]<3>; [Ex-155#]<1>; [Ex-168$]<1>; Ex-172$<1>;

324.3 12:9,3.3 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-169$<1>;

325.1 12:10,1.1 Autograph;

325.2 12:10,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [it-b\*]<5>; Ex-168$<1>;

326.1 12:10,2.1 Autograph;

326.2 12:10,2.2 [D06^2]<4>; [6]<6>; [Ex-150]<5>; [Ex-164]<2>; Ex-166#<1>;

327.1 12:10,3.1 Autograph;

327.2 12:10,3.2 [D06^2]<4>; [6]<6>; [Ex-150]<5>; [Ex-164]<2>; Ex-166#<1>;

328.1 12:10,4.1 [Ex-150]<5>; Autograph;

328.2 12:10,4.2 [01^c%]<2>; [01^2]<2>; [P025\*%]<3>; [0201%]<3>; [1175\*%]<3>; [1175^c%]<3>; [sa^a%]<2>; [sy^p%]<6>; [Ex-154]<3>; [Ex-166#]<1>; [Ex-168$]<1>; Ex-172$<1>;

329.1 12:10,5.1 [D06^2]<4>; [6]<6>; Autograph;

329.2 12:10,5.2 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [33\*]<5>; [Ex-155#]<1>; [Ex-157]<3>; [Ex-169$]<1>; Ex-172$<1>;

330.1 12:10,6.1 Autograph;

330.2 12:10,6.2 [D06\*]<5>; [Ex-157]<3>; Ex-168$<1>;

331.1 12:11,1.1 [D06^1]<2>; [Cl^a%]<3>; [Cl^b%]<3>; Autograph;

331.2 12:11,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [0201%]<3>; [1175\*%]<3>; [1175^c%]<3>; [sy^p%]<6>; [Ex-166#]<1>; [Ex-168$]<1>; Ex-172$<1>;

332.1 12:12,1.1 [L019\*%]<6>; [sy^h%]<4>; [sy^p%]<6>; Autograph;

332.2 12:12,1.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [it-b\*]<5>; [Ambst%]<5>; Ex-155#<1>;

333.1 12:13,1.1 [365%]<5>; [630%]<6>; [sy^h%]<4>; [sy^p%]<6>; Autograph;

333.2 12:13,1.2 [2464\*%]<3>; [vg^cl]<4>; [it-f\*]<3>; [Ex-151]<3>; [Ex-153]<4>; Ex-169$<1>;

334.1 12:13,2.1 Autograph;

334.2 12:13,2.2 [630%]<6>; [1505\*%]<3>; [sy^h%]<4>; [Cl^a%]<3>; [Cl^b%]<3>; [Ex-147]<6>; Ex-168$<1>;

334.3 12:13,2.3 Ex-157<3>;

335.1 12:18,1.1 [D06^1]<2>; Autograph;

335.2 12:18,1.2 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [1505\*%]<3>; [Ex-157]<3>; [Ex-158]<3>; Ex-168$<1>;

336.1 12:19,1.1 Autograph;

336.2 12:19,1.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [33\*]<5>; [Ex-158]<3>; Ex-168$<1>;

337.1 12:20,1.1 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

337.2 12:20,1.2 [P^46\*]<3>; [6]<6>; [vg^b]<3>; [Ex-156]<4>; [Ex-158]<3>; Ex-169$<1>;

338.1 12:21,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [vg^cl]<4>; [Ambst%]<5>; Autograph;

338.2 12:21,1.2 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [P025\*%]<3>; [33\*]<5>; [104\*%]<3>; [326]<5>; [365%]<5>; [614\*]<5>; [sy^p%]<6>; [Ex-157]<3>; Ex-166#<1>;

339.1 12:24,1.1 Autograph;

339.2 12:24,1.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [sy^p%]<6>; Ex-168$<1>;

340.1 12:24,2.1 [6]<6>; Autograph;

340.2 12:24,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [1739\*]<6>; [Ex-155#]<1>; [Ex-168$]<1>; Ex-172$<1>;

341.1 12:25,1.1 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [D06^2]<4>; [044\*]<3>; [365%]<5>; [630%]<6>; [TR]<5>; [sy^h%]<4>; [sy^p%]<6>; Autograph;

341.2 12:25,1.2 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [2464\*%]<3>; [vg^b]<3>; [it-ar]<5>; [Ex-154]<3>; Ex-155#<1>;

342.1 12:26,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [630%]<6>; [Ex-147]<6>; Autograph;

342.2 12:26,1.2 [044\*]<3>; [1175\*%]<3>; [1175^c%]<3>; [sy^h%]<4>; [Ex-150]<5>; [Ex-164]<2>; Ex-166#<1>;

343.1 12:26,2.1 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [0285%]<2>; [33\*]<5>; [NA-27]<2>; [Ex-147]<6>; Autograph;

343.2 12:26,2.2 Ex-165#<1>;

344.1 12:27,1.1 [vg^st]<4>; Autograph;

344.2 12:27,1.2 [D06\*]<5>; [044\*]<3>; [it-t%]<2>; [sy^h%]<4>; [Ambst%]<5>; [Ex-163]<2>; Ex-168$<1>;

345.1 12:31,1.1 [326]<5>; [vg^st]<4>; [l^846]<5>; [Eus^a%]<3>; [Eus^b%]<3>; [Ex-148]<5>; Autograph;

345.2 12:31,1.2 [945]<6>; [vg^cl]<4>; [it-g%]<2>; [it-t%]<2>; [bo^b%]<2>; [Or^a%]<4>; [Or^b%]<3>; [Ex-152]<2>; Ex-166#<1>;

346.1 12:31,2.1 Autograph;

346.2 12:31,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-168$<1>;

347.1 13:2,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [326]<5>; [Cl^a%]<3>; [Cl^b%]<3>; Autograph;

347.2 13:2,1.2 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [Ex-147]<6>; [Ex-155#]<1>; [Ex-157]<3>; [Ex-169$]<1>; Ex-172$<1>;

348.1 13:3,1.1 [1739\*]<6>; Autograph;

348.2 13:3,1.2 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [D06^2]<4>; [81\*%]<3>; [104\*%]<3>; [630%]<6>; [1175\*%]<3>; [1175^c%]<3>; [1881\*]<7>; [Ex-148]<5>; Ex-166#<1>;

348.3 13:3,1.3 [Ex-150]<5>; [Ex-152]<2>; Ex-168$<1>;

348.4 13:3,1.4 [1505\*%]<3>; [sy^h%]<4>; Ex-169$<1>;

349.1 13:4,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

349.2 13:4,1.2 [33\*]<5>; [104\*%]<3>; [629]<5>; [1175\*%]<3>; [1175^c%]<3>; [2464\*%]<3>; [sa^a%]<2>; [bo^b%]<2>; [Ex-158]<3>; Ex-166#<1>;

349.3 13:4,1.3 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-169$<1>;

350.1 13:5,1.1 Autograph;

350.2 13:5,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-168$<1>;

351.1 13:5,2.1 [P^46^1]<3>; [P^46^2]<3>; Autograph;

351.2 13:5,2.2 P^46\*<3>;

351.3 13:5,2.3 [Cl^b%]<3>; [Ex-164]<2>; Ex-169$<1>;

352.1 13:8,1.1 [Cl^b%]<3>; Ex-165#<1>;

352.2 13:8,1.2 [Ex-147]<6>; Autograph;

353.1 13:8,2.1 Autograph;

353.2 13:8,2.2 Ex-158<3>;

354.1 13:8,3.1 [P025\*%]<3>; [81\*%]<3>; [104\*%]<3>; [1175\*%]<3>; [1175^c%]<3>; [1505\*%]<3>; [2464\*%]<3>; [Ex-150]<5>; Autograph;

354.2 13:8,3.2 [01^c%]<2>; [01^2]<2>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [vg^b]<3>; [it-ar]<5>; [sa^b%]<2>; [bo^b%]<2>; [Ex-161]<2>; Ex-169$<1>;

355.1 13:10,1.1 [6]<6>; Autograph;

355.2 13:10,1.2 [D06^1]<2>; [Ex-151]<3>; Ex-168$<1>;

356.1 13:11,1.1 [6]<6>; vg^st<4>; Autograph;

356.2 13:11,1.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [K\*%]<2>; [33\*]<5>; [vg^cl]<4>; [it-b\*]<5>; Cl^a%<3>; Cl^b%<3>; Meth%<4>; Tert%<4>; [Ex-147]<6>; Ex-155#<1>;

357.1 13:12,1.1 Autograph;

357.2 13:12,1.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [81\*%]<3>; [1175\*%]<3>; [1175^c%]<3>; [2464\*%]<3>; [sy^p%]<6>; [Cl^b%]<3>; [Ex-150]<5>; Ex-168$<1>;

357.3 13:12,1.3 33\*<5>;

357.4 13:12,1.4 [L019\*%]<6>; [P025\*%]<3>; [it-ar]<5>; [Irlat^a%]<3>; [Or^a%]<4>; [Or^b%]<3>; Ex-169$<1>;

358.1 13:13,1.1 Autograph;

358.2 13:13,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [sy^p%]<6>; [Cl^a%]<3>; [Cl^b%]<3>; Ex-168$<1>;

359.1 14:2,1.1 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [6]<6>; Autograph;

359.2 14:2,1.2 [0243\*%]<6>; [0243^c%]<6>; [33\*]<5>; [Ex-147]<6>; [Ex-155#]<1>; [Ex-157]<3>; [Ex-168$]<1>; Ex-172$<1>;

360.1 14:2,2.1 Autograph;

360.2 14:2,2.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [vg^b]<3>; [it-b\*]<5>; Ex-168$<1>;

361.1 14:4,1.1 Autograph;

361.2 14:4,1.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [vg^cl]<4>; Ex-168$<1>;

362.1 14:5,1.1 [D06^2]<4>; [629]<5>; [TR]<5>; Autograph;

362.2 14:5,1.2 Ex-152<2>;

362.3 14:5,1.3 [1505\*%]<3>; [Ex-150]<5>; Ex-169$<1>;

362.4 14:5,1.4 D06\*<5>;

362.5 14:5,1.5 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-170$<1>;

363.1 14:6,1.1 [33\*]<5>; Autograph;

363.2 14:6,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [vg^b]<3>; [Pel%]<5>; [Ex-154]<3>; Ex-168$<1>;

364.1 14:7,1.1 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

364.2 14:7,1.2 [bo^a%]<2>; [bo^b%]<2>; [Ex-158]<3>; [Ex-160]<3>; Ex-169$<1>;

365.1 14:8,1.1 Autograph;

365.2 14:8,1.2 [Ex-152]<2>; [Ex-158]<3>; Ex-166#<1>;

366.1 14:10,1.1 [6]<6>; Autograph;

366.2 14:10,1.2 [vg^b]<3>; [it-ar]<5>; [it-g%]<2>; Ex-155#<1>;

367.1 14:11,1.1 Autograph;

367.2 14:11,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [D06^2]<4>; [81\*%]<3>; [1175\*%]<3>; [1175^c%]<3>; [sa^a%]<2>; [sa^b%]<2>; [bo^a%]<2>; [bo^b%]<2>; [Ex-148]<5>; [Ex-150]<5>; [Ex-166#]<1>; [Ex-168$]<1>; Ex-172$<1>;

368.1 14:12,1.1 Autograph;

368.2 14:12,1.2 [P025\*%]<3>; [1175\*%]<3>; [1175^c%]<3>; [vg^b]<3>; [it-ar]<5>; [it-r%]<3>; [sa^a%]<2>; [sa^b%]<2>; [bo^a%]<2>; [bo^b%]<2>; [sy^p%]<6>; [Pel%]<5>; [Spec%]<5>; Ex-168$<1>;

369.1 14:12,2.1 Autograph;

369.2 14:12,2.2 [I%]<4>; [Ambst%]<5>; [Ex-157]<3>; Ex-168$<1>;

370.1 14:13,1.1 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

370.2 14:13,1.2 Ex-155#<1>;

371.1 14:14,1.1 Autograph;

371.2 14:14,1.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [it-b\*]<5>; [sa^a%]<2>; [Ambst%]<5>; [Ex-150]<5>; [Ex-164]<2>; Ex-168$<1>;

372.1 14:15,1.1 [Ex-150]<5>; Autograph;

372.2 14:15,1.2 [01^c%]<2>; [01^2]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Ex-161]<2>; Ex-168$<1>;

373.1 14:15,2.1 Autograph;

373.2 14:15,2.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [P025\*%]<3>; [33\*]<5>; [1175\*%]<3>; [1175^c%]<3>; [2464\*%]<3>; [Ex-157]<3>; Ex-168$<1>;

374.1 14:15,3.1 Autograph;

374.2 14:15,3.2 [Ex-164]<2>; Ex-166#<1>;

375.1 14:16,1.1 [6]<6>; Autograph;

375.2 14:16,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [048%]<2>; [Ex-152]<2>; Ex-168$<1>;

376.1 14:16,2.1 [P025\*%]<3>; [81\*%]<3>; [365%]<5>; [1175\*%]<3>; [1175^c%]<3>; [NA-27]<2>; [Ex-158]<3>; Autograph;

376.2 14:16,2.2 [Ex-150]<5>; [Ex-152]<2>; Ex-169$<1>;

376.3 14:16,2.3 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [0243\*%]<6>; [0243^c%]<6>; [629]<5>; [Ex-147]<6>; [Ex-165#]<1>; [Ex-170$]<1>; Ex-172$<1>;

377.1 14:18,1.1 Autograph;

377.2 14:18,1.2 [K\*%]<2>; [L019\*%]<6>; [326]<5>; [614\*]<5>; [629]<5>; [945]<6>; [vg^cl]<4>; [sa^a%]<2>; Ex-168$<1>;

377.3 14:18,1.3 Ex-166#<1>;

377.4 14:18,1.4 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-169$<1>;

378.1 14:18,2.1 [K\*%]<2>; [P025\*%]<3>; [048%]<2>; [81\*%]<3>; [104\*%]<3>; [365%]<5>; [1175\*%]<3>; [1175^c%]<3>; [1505\*%]<3>; [2464\*%]<3>; [NA-27]<2>; [it-g%]<2>; [sa^a%]<2>; [sa^b%]<2>; [Ex-150]<5>; [Ex-152]<2>; [Ex-164]<2>; Ex-168$<1>;

378.2 14:18,2.2 Autograph;

379.1 14:18,3.1 [6]<6>; Autograph;

379.2 14:18,3.2 Ex-151<3>;

379.3 14:18,3.3 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-168$<1>;

379.4 14:18,3.4 Ex-157<3>;

380.1 14:19,1.1 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

380.2 14:19,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-169$<1>;

380.3 14:19,1.3 [048%]<2>; [it-d]<4>; [Ex-151]<3>; [Ex-168$]<1>; [Ex-170$]<1>; Ex-172$<1>;

380.4 14:19,1.4 Ex-156<4>;

381.1 14:21,1.1 Autograph;

381.2 14:21,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-168$<1>;

382.1 14:21,2.1 [326]<5>; [Ex-148]<5>; Autograph;

382.2 14:21,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [945]<6>; [sa^a%]<2>; [sa^b%]<2>; [bo^a%]<2>; [bo^b%]<2>; [Ex-147]<6>; [Ex-151]<3>; [Ex-166#]<1>; [Ex-168$]<1>; Ex-172$<1>;

383.1 14:23,1.1 [0201%]<3>; Autograph;

383.2 14:23,1.2 [G012\*]<5>; [Ex-164]<2>; Ex-168$<1>;

384.1 14:25,1.1 [6]<6>; Autograph;

384.2 14:25,1.2 [Ex-147]<6>; [Ex-152]<2>; Ex-168$<1>;

385.1 14:25,2.1 Autograph;

385.2 14:25,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-168$<1>;

386.1 14:25,3.1 [33\*]<5>; [Ex-147]<6>; Autograph;

386.2 14:25,3.2 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [044\*]<3>; [Ex-154]<3>; Ex-169$<1>;

387.1 14:26,1.1 Ex-165#<1>;

387.2 14:26,1.2 Autograph;

388.1 14:28,1.1 Autograph;

388.2 14:28,1.2 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [365%]<5>; [Ex-158]<3>; Ex-168$<1>;

389.1 14:31,1.1 Autograph;

389.2 14:31,1.2 6<6>;

389.3 14:31,1.3 Ex-150<5>;

389.4 14:31,1.4 [33\*]<5>; [2464\*%]<3>; [vg^b]<3>; Ex-168$<1>;

390.1 14:32,1.1 Autograph;

390.2 14:32,1.2 [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [044\*]<3>; [vg^b]<3>; [sy^p%]<6>; [Ex-156]<4>; Ex-168$<1>;

391.1 14:33,1.1 Autograph;

391.2 14:33,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-168$<1>;

391.3 14:33,1.3 Ambst%<5>;

392.1 14:34,1.1 Autograph;

392.2 14:34,1.2 [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [vg^b]<3>; [Ex-156]<4>; Ex-168$<1>;

393.1 14:34,2.1 Autograph;

393.2 14:34,2.2 [D06^c%]<3>; [D06^1]<2>; [Ex-151]<3>; [Ex-156]<4>; Ex-168$<1>;

394.1 14:34,3.1 [D06^2]<4>; Autograph;

394.2 14:34,3.2 [McionE%]<5>; [Ex-147]<6>; [Ex-152]<2>; Ex-168$<1>;

395.1 14:34,4.1 [Epiph^a%]<3>; [Epiph^b%]<3>; Autograph;

395.2 14:34,4.2 [Ex-150]<5>; [Ex-152]<2>; Ex-166#<1>;

396.1 14:34,5.1 Autograph;

396.2 14:34,5.2 Ex-157<3>;

397.1 14:34,6.1 [A\*]<4>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Ex-150]<5>; Autograph;

397.2 14:34,6.2 Ex-161<2>;

398.1 14:34,7.1 Autograph;

398.2 14:34,7.2 [81\*%]<3>; [Ex-164]<2>; Ex-168$<1>;

399.1 14:37,1.1 [0243\*%]<6>; [0243^c%]<6>; [1739\*]<6>; [vg^b]<3>; Autograph;

399.2 14:37,1.2 [01\*]<4>; [81\*%]<3>; Ex-169$<1>;

399.3 14:37,1.3 Ex-156<4>;

399.4 14:37,1.4 [sa^a%]<2>; [Ex-152]<2>; Ex-166#<1>;

399.5 14:37,1.5 [Ex-150]<5>; [Ex-157]<3>; Ex-170$<1>;

400.1 14:38,1.1 [6]<6>; Autograph;

400.2 14:38,1.2 [A^c]<4>; [Ex-147]<6>; [Ex-155#]<1>; [Ex-164]<2>; [Ex-168$]<1>; Ex-172$<1>;

401.1 14:39,1.1 [01^c%]<2>; [01^2]<2>; [D06^1]<2>; [048%]<2>; [326]<5>; [NA-27]<2>; [vg^b]<3>; [Ex-144]<4>; [Ex-161]<2>; Ex-168$<1>;

401.2 14:39,1.2 [Ex-153]<4>; Autograph;

402.1 14:39,2.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

402.2 14:39,2.2 [Ex-150]<5>; [Ex-164]<2>; Ex-168$<1>;

403.1 14:39,3.1 [01^c%]<2>; [01^2]<2>; [6]<6>; [Ex-165#]<1>; [Ex-169$]<1>; Ex-172$<1>;

403.2 14:39,3.2 Autograph;

403.3 14:39,3.3 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [sy^h%]<4>; [sy^p%]<6>; Ex-168$<1>;

403.4 14:39,3.4 Ex-164<2>;

404.1 14:40,1.1 Autograph;

404.2 14:40,1.2 [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [vg^b]<3>; [Ex-156]<4>; Ex-168$<1>;

405.1 15:2,1.1 Autograph;

405.2 15:2,1.2 [D06^c%]<3>; [vg^b]<3>; [it-t%]<2>; [Ex-156]<4>; Ex-168$<1>;

406.1 15:3,1.1 Autograph;

406.2 15:3,1.2 [it-b\*]<5>; [Ambst%]<5>; [Irlat^a%]<3>; Ex-168$<1>;

407.1 15:5,1.1 [Ex-150]<5>; Autograph;

407.2 15:5,1.2 [01^c%]<2>; [01^2]<2>; [614\*]<5>; [Ex-161]<2>; Ex-168$<1>;

407.3 15:5,1.3 Ex-166#<1>;

408.1 15:5,2.1 [D06^c%]<3>; [D06^1]<2>; Autograph;

408.2 15:5,2.2 Ex-166#<1>;

409.1 15:6,1.1 [6]<6>; [sy^h%]<4>; Autograph;

409.2 15:6,1.2 [A^c]<4>; [048%]<2>; [33\*]<5>; [Ex-155#]<1>; [Ex-168$]<1>; Ex-172$<1>;

410.1 15:7,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [NA-27]<2>; [Ex-158]<3>; Autograph;

410.2 15:7,1.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [614\*]<5>; Ex-165#<1>;

411.1 15:10,1.1 Autograph;

411.2 15:10,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-168$<1>;

411.3 15:10,1.3 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [it-b\*]<5>; [Ambst%]<5>; Ex-169$<1>;

412.1 15:10,2.1 [D06^1]<2>; [33\*]<5>; [Ex-147]<6>; Autograph;

412.2 15:10,2.2 [6]<6>; [Ex-154]<3>; [Ex-158]<3>; Ex-166#<1>;

413.1 15:12,1.1 Autograph;

413.2 15:12,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [0270%]<4>; [Ex-168$]<1>; Ex-172$<1>;

414.1 15:14,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [K\*%]<2>; [326]<5>; [NA-27]<2>; [Epiph^a%]<3>; [Epiph^b%]<3>; [Ex-161]<2>; Ex-168$<1>;

414.2 15:14,1.2 [Irlat^a%]<3>; [Ex-150]<5>; Autograph;

415.1 15:14,2.1 [365%]<5>; [630%]<6>; Autograph;

415.2 15:14,2.2 [D06\*]<5>; [6]<6>; [81\*%]<3>; [vg^b]<3>; [it-ar]<5>; [sa^b%]<2>; [Epiph^a%]<3>; [Epiph^b%]<3>; [Ex-153]<4>; [Ex-158]<3>; Ex-169$<1>;

416.1 15:15,1.1 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

416.2 15:15,1.2 [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [vg^b]<3>; [it-r%]<3>; [sy^p%]<6>; [Irlat^a%]<3>; [Ex-156]<4>; Ex-169$<1>;

417.1 15:17,1.1 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

417.2 15:17,1.2 [D06\*]<5>; Irlat^a%<3>; Ex-158<3>;

418.1 15:20,1.1 [6]<6>; Autograph;

418.2 15:20,1.2 Ex-152<2>;

419.1 15:24,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Autograph;

419.2 15:24,1.2 [33\*]<5>; [Ex-147]<6>; [Ex-151]<3>; Ex-166#<1>;

420.1 15:25,1.1 Autograph;

420.2 15:25,1.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [33\*]<5>; [104\*%]<3>; [629]<5>; [vg^b]<3>; [it-ar]<5>; [it-r%]<3>; [sy^p%]<6>; [Epiph^a%]<3>; [Epiph^b%]<3>; [Ex-157]<3>; Ex-168$<1>;

421.1 15:27,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [it-r%]<3>; Autograph;

421.2 15:27,1.2 [33\*]<5>; [630%]<6>; [1505\*%]<3>; [Ex-164]<2>; Ex-166#<1>;

422.1 15:28,1.1 [vg^cl]<4>; [Epiph^a%]<3>; [Epiph^b%]<3>; [Tert%]<4>; [Ex-147]<6>; Autograph;

422.2 15:28,1.2 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [1175\*%]<3>; [1175^c%]<3>; [vg^st]<4>; [it-b\*]<5>; [sa^a%]<2>; [sy^p%]<6>; [Irlat^a%]<3>; [Ex-153]<4>; [Ex-164]<2>; Ex-168$<1>;

423.1 15:28,2.1 Autograph;

423.2 15:28,2.2 [vg^b]<3>; [Ambst%]<5>; Ex-168$<1>;

424.1 15:28,3.1 [01\*]<4>; [01^1%]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [NA-27]<2>; [Ex-147]<6>; Autograph;

424.2 15:28,3.2 [D06\*]<5>; [6]<6>; Ex-165#<1>;

425.1 15:29,1.1 [075%]<4>; [sy^h%]<4>; Autograph;

425.2 15:29,1.2 [bo^b%]<2>; [Ex-151]<3>; Ex-169$<1>;

425.3 15:29,1.3 69<5>;

426.1 15:31,1.1 Autograph;

426.2 15:31,1.2 [6]<6>; [365%]<5>; [614\*]<5>; [629]<5>; [1505\*%]<3>; [Ex-147]<6>; [Ex-157]<3>; Ex-168$<1>;

427.1 15:31,2.1 [326]<5>; [sy^h%]<4>; [sy^p%]<6>; Autograph;

427.2 15:31,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [it-b\*]<5>; [Ambst%]<5>; [Pel%]<5>; [Ex-150]<5>; [Ex-152]<2>; Ex-169$<1>;

428.1 15:31,3.1 Autograph;

428.2 15:31,3.2 [D06\*]<5>; [it-b\*]<5>; [Ambst%]<5>; [Pel%]<5>; Ex-168$<1>;

429.1 15:34,1.1 [D06^2]<4>; Autograph;

429.2 15:34,1.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [it-ar]<5>; [Ex-147]<6>; [Ex-151]<3>; [Ex-157]<3>; Ex-168$<1>;

430.1 15:37,1.1 [D06\*]<5>; [it-ar]<5>; Autograph;

430.2 15:37,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [Ex-160]<3>; Ex-169$<1>;

431.1 15:45,1.1 Autograph;

431.2 15:45,1.2 [K\*%]<2>; [326]<5>; [365%]<5>; [Irlat^a%]<3>; [Ex-158]<3>; Ex-168$<1>;

432.1 15:45,2.1 Autograph;

432.2 15:45,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-168$<1>;

433.1 15:47,1.1 [0243\*%]<6>; [0243^c%]<6>; [6]<6>; [1739\*]<6>; Autograph;

433.2 15:47,1.2 [630%]<6>; [McionA%]<2>; Ex-169$<1>;

433.3 15:47,1.3 [D06^1]<2>; [Ex-150]<5>; [Ex-155#]<1>; [Ex-157]<3>; [Ex-170$]<1>; Ex-172$<1>;

433.4 15:47,1.4 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-171$<1>;

434.1 15:47,2.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; Autograph;

434.2 15:47,2.2 Ex-166#<1>;

435.1 15:49,1.1 [6]<6>; [630%]<6>; [TR]<5>; [NA-27]<2>; [sa^a%]<2>; [Ex-147]<6>; [Ex-158]<3>; Ex-168$<1>;

435.2 15:49,1.2 Autograph;

436.1 15:50,1.1 Autograph;

436.2 15:50,1.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [it-b\*]<5>; [Ambst%]<5>; [Irlat^a%]<3>; [McionT%]<4>; [Ex-168$]<1>; Ex-172$<1>;

437.1 15:50,2.1 [01\*]<4>; [01^c%]<2>; [01^1%]<4>; [01^2]<2>; [365%]<5>; [NA-27]<2>; [sa^a%]<2>; [sy^h%]<4>; [Cl^b%]<3>; [Ex-164]<2>; Ex-168$<1>;

437.2 15:50,2.2 Autograph;

437.3 15:50,2.3 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [vg^b]<3>; [it-ar]<5>; [bo^a%]<2>; [bo^b%]<2>; [Ambst%]<5>; [Irlat^b%]<4>; [McionT%]<4>; Ex-169$<1>;

438.1 15:51,1.1 Autograph;

438.2 15:51,1.2 Ex-157<3>;

439.1 15:51,2.1 [C\*%]<4>; [D06\*]<5>; [NA-27]<2>; [it-b\*]<5>; [Ex-150]<5>; [Ex-164]<2>; Ex-168$<1>;

439.2 15:51,2.2 [0243^c%]<6>; [Ex-147]<6>; Autograph;

440.1 15:51,3.1 [0243^c%]<6>; [Ex-147]<6>; Autograph;

440.2 15:51,3.2 [01^c%]<2>; [01^2]<2>; [Hier^a%]<2>; [Ex-161]<2>; Ex-169$<1>;

440.3 15:51,3.3 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [A^c]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; Ex-170$<1>;

440.4 15:51,3.4 Ex-166#<1>;

441.1 15:52,1.1 [Ex-147]<6>; Autograph;

441.2 15:52,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [6]<6>; [Ex-150]<5>; Ex-168$<1>;

442.1 15:52,2.1 Autograph;

442.2 15:52,2.2 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [P025\*%]<3>; [Ex-157]<3>; Ex-168$<1>;

443.1 15:54,1.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [vg^b]<3>; Autograph;

443.2 15:54,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [01\*]<4>; [C\*%]<4>; [0121%]<6>; [0243\*%]<6>; [0243^c%]<6>; [1175\*%]<3>; [1175^c%]<3>; [1739\*]<6>; [sa^b%]<2>; [bo^a%]<2>; [bo^b%]<2>; [Ex-166#]<1>; [Ex-168$]<1>; Ex-172$<1>;

443.3 15:54,1.3 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [326]<5>; [365%]<5>; [614\*]<5>; [629]<5>; [Ex-157]<3>; Ex-169$<1>;

444.1 15:54,2.1 Autograph;

444.2 15:54,2.2 [D06\*]<5>; [088%]<2>; [Cyp^a%]<5>; [Tert%]<4>; [Ex-164]<2>; Ex-168$<1>;

445.1 15:54,3.1 [1739\*]<6>; Autograph;

445.2 15:54,3.2 [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Ambst%]<5>; [Cyp^a%]<5>; [Eus^a%]<3>; [Irlat^a%]<3>; [Tert%]<4>; Ex-168$<1>;

445.3 15:54,3.3 [A^c]<4>; [Ex-147]<6>; [Ex-155#]<1>; [Ex-170$]<1>; Ex-172$<1>;

445.4 15:54,3.4 [81\*%]<3>; [326]<5>; [1175\*%]<3>; [1175^c%]<3>; [2464\*%]<3>; [Ex-153]<4>; Ex-169$<1>;

446.1 15:54,4.1 Autograph;

446.2 15:54,4.2 [D06\*]<5>; [088%]<2>; [Cyp^a%]<5>; [Tert%]<4>; [Ex-164]<2>; Ex-168$<1>;

447.1 16:2,1.1 [D06^2]<4>; [044\*]<3>; [sy^p%]<6>; Autograph;

447.2 16:2,1.2 [bo^a%]<2>; [bo^b%]<2>; [Ex-150]<5>; Ex-155#<1>;

448.1 16:2,2.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Ex-151]<3>; Autograph;

448.2 16:2,2.2 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [K\*%]<2>; [088%]<2>; [6]<6>; [81\*%]<3>; [104\*%]<3>; [365%]<5>; [1175\*%]<3>; [1175^c%]<3>; [Ex-150]<5>; [Ex-155#]<1>; [Ex-157]<3>; [Ex-168$]<1>; Ex-172$<1>;

449.1 16:3,1.1 Autograph;

449.2 16:3,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; Ex-168$<1>;

450.1 16:4,1.1 Autograph;

450.2 16:4,1.2 [01\*]<4>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [Ex-152]<2>; Ex-168$<1>;

451.1 16:6,1.1 Autograph;

451.2 16:6,1.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [vg^b]<3>; [Ambst%]<5>; Ex-168$<1>;

452.1 16:6,2.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; 088%<2>; Autograph;

452.2 16:6,2.2 P^34%<2>; [0121%]<6>; [0243\*%]<6>; [0243^c%]<6>; [6]<6>; [1739^c]<6>; [Ex-158]<3>; Ex-168$<1>;

453.1 16:6,3.1 Autograph;

453.2 16:6,3.2 [6]<6>; [sy^p%]<6>; [Ex-150]<5>; [Ex-164]<2>; Ex-168$<1>;

453.3 16:6,3.3 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [it-ar]<5>; Ex-169$<1>;

454.1 16:7,1.1 [D06^2]<4>; [6]<6>; [sy^p%]<6>; Autograph;

454.2 16:7,1.2 [vg^b]<3>; [Ex-152]<2>; Ex-169$<1>;

455.1 16:8,1.1 [0121%]<6>; [0243\*%]<6>; [0243^c%]<6>; Autograph;

455.2 16:8,1.2 [B^2]<4>; [D06^2]<4>; [075%]<4>; [6]<6>; [81\*%]<3>; [629]<5>; [2464\*%]<3>; [Ex-153]<4>; Ex-169$<1>;

456.1 16:10,1.1 Autograph;

456.2 16:10,1.2 [6]<6>; [sa^a%]<2>; [sy^p%]<6>; [Ex-150]<5>; [Ex-164]<2>; Ex-168$<1>;

457.1 16:12,1.1 Autograph;

457.2 16:12,1.2 [01\*]<4>; [D06\*]<5>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [vg^cl]<4>; [it-ar]<5>; [Ambst%]<5>; Ex-168$<1>;

458.1 16:15,1.1 [it-r%]<3>; [Ambst%]<5>; Autograph;

458.2 16:15,1.2 [01^2]<2>; [D06^2]<4>; [104\*%]<3>; [629]<5>; [1175\*%]<3>; [1175^c%]<3>; [2464\*%]<3>; vg^st<4>; [bo^a%]<2>; [bo^b%]<2>; Ex-166#<1>;

458.3 16:15,1.3 [C\*%]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [365%]<5>; [1505\*%]<3>; vg^cl<4>; [it-ar]<5>; [Pel%]<5>; Ex-169$<1>;

459.1 16:15,2.1 Autograph;

459.2 16:15,2.2 33\*<5>;

459.3 16:15,2.3 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [bo^b%]<2>; Ex-168$<1>;

460.1 16:17,1.1 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [P025\*%]<3>; [NA-27]<2>; [Ex-153]<4>; [Ex-158]<3>; Ex-168$<1>;

460.2 16:17,1.2 Autograph;

461.1 16:17,2.1 [630%]<6>; [Ex-147]<6>; Autograph;

461.2 16:17,2.2 [D06^2]<4>; [6]<6>; [sy^p%]<6>; [Ex-150]<5>; [Ex-157]<3>; Ex-166#<1>;

462.1 16:19,1.1 Autograph;

462.2 16:19,1.2 Ex-157<3>;

463.1 16:19,2.1 Autograph;

463.2 16:19,2.2 [P^46\*]<3>; [P^46^c]<3>; [P^46^1]<3>; [P^46^2]<3>; [69]<5>; [Ex-168$]<1>; Ex-172$<1>;

464.1 16:19,3.1 [D06\*]<5>; [D06^c%]<3>; [D06^1]<2>; [D06^2]<4>; Autograph;

464.2 16:19,3.2 [F\*]<5>; [G012\*]<5>; [G012^c]<5>; [sa^a%]<2>; [sa^b%]<2>; [bo^a%]<2>; [bo^b%]<2>; [Ex-151]<3>; [Ex-153]<4>; [Ex-164]<2>; Ex-168$<1>;

465.1 16:19,4.1 vg^st<4>; [it-r%]<3>; Autograph;

465.2 16:19,4.2 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [1881^c]<7>; [vg^cl]<4>; [it-g%]<2>; [Ex-152]<2>; Ex-166#<1>;

466.1 16:19,5.1 [D06^c%]<3>; Autograph;

466.2 16:19,5.2 [vg^cl]<4>; [it-g%]<2>; [Ex-162]<2>; [Ex-168$]<1>; Ex-172$<1>;

467.1 16:22,1.1 [D06\*]<5>; Autograph;

467.2 16:22,1.2 [B^2]<4>; [D06^2]<4>; [G012\*]<5>; [K\*%]<2>; [L019\*%]<6>; [044\*]<3>; [323\*]<5>; [365%]<5>; [1505\*%]<3>; [vg^cl]<4>; [sy^h%]<4>; [sy^p%]<6>; Ex-168$<1>;

467.3 16:22,1.3 [F\*]<5>; [G012^c]<5>; [Ex-150]<5>; [Ex-151]<3>; Ex-169$<1>;

468.1 16:23,1.1 Ex-165#<1>;

468.2 16:23,1.2 [C\*%]<4>; [C^1%]<4>; [C^2%]<4>; [C^3%]<4>; [vg^cl]<4>; [it-g%]<2>; [bo^a%]<2>; [bo^b%]<2>; [Ex-150]<5>; [Ex-157]<3>; Autograph;

469.1 16:24,1.1 [F\*]<5>; [81\*%]<3>; [NA-27]<2>; [sa^a%]<2>; [bo^b%]<2>; [sy^p%]<6>; [Ambst%]<5>; [Ex-153]<4>; [Ex-164]<2>; Ex-168$<1>;

469.2 16:24,1.2 [1739^c]<6>; Autograph;

469.3 16:24,1.3 [G012\*]<5>; [G012^c]<5>; Ex-169$<1>;

Exemplars mixed from autograph:

Table 5.2: Distribution of Witnesses by Completeness:

% Complete Number of Witnesses

1 39

2 8

3 1

4 3

5 3

6 2

7 1

8 0

9 0

10 2

11 1

12 2

13 5

14 6

15 2

16 8

17 9

18 0

19 5

20 46

Table 5.1: Distribution of Extant Witnesses by century:

Century Number of Witnesses

2 5

3 18

4 14

5 20

6 12

7 7

8 4

9 16

10 12

11 10

12 7

13 3

14 6

15 3

16 1

17 0

18 0

19 1

20 3

21 1

Table 5.3: Distribution of Extant Witnesses > 80% by century:

Century Number of Witnesses

2 0

3 1

4 4

5 6

6 2

7 2

8 0

9 7

10 7

11 5

12 3

13 3

14 3

15 3

16 0

17 0

18 0

19 0

20 0

21 0

Table 5.4a and 7.1a: Distribution of the number of alternatives at a place of variation:

Number of Alternatives Number of Places of Variation

1 9566

2 1248

3 3

4 0

5 0

6 0

7 0

8 0

9 0

Table 5.4 and 7.1: Distribution of the number of variants at a place of variation:

Number of variants Number of Places of Variation

1 0

2 380

3 64

4 21

5 4

6 0

7 0

8 0

9 0

10 0

Total= 1056

Table 7.2: Distribution of Autographic Variation Type:

Variation type Number of Variants

Omit a word 71

Omit a phrase 19

Alternate word 192

Alternate words 80

Transposed words 14

Added word or phrase 93

NA-27 text 0

Total = 469

Table 7.3: Distribution of Variation Type:

Variation type Number of Variants

Omit a word 143

Omit a phrase 39

Alternate word 425

Alternate words 225

Transposed words 28

Added word or phrase 196

NA-27 text 0

Total = 1056

Statistics for the extant witnesses:

Minimum difference = 0

Maximum difference = 255

Number of comparisons = 1035

Average difference between the 143 extant witnesses = 124.79

Average error between the 143 extant witnesses = 26.61%

Standard deviation between the 143 extant witnesses = 78.68

Distribution of Differences between Extant Witnesses:

0 8

1 26

2 53

3 17

4 23

5 25

6 3

7 5

8 6

9 22

10 3

11 3

12 4

14 3

15 13

16 2

17 2

18 1

19 1

20 2

22 2

23 12

24 1

25 1

26 2

28 1

29 1

30 2

31 2

35 2

36 11

37 2

38 2

39 2

41 1

42 1

43 1

51 1

53 1

56 4

61 1

64 1

66 3

67 3

68 2

69 11

70 3

71 2

74 1

76 1

80 1

85 1

87 1

89 1

90 1

91 2

93 1

94 3

95 11

96 3

97 2

98 1

100 2

101 1

103 1

105 7

109 2

111 2

112 2

113 1

114 2

115 4

117 2

118 5

119 5

120 2

121 9

122 3

123 16

124 2

125 7

126 6

127 2

128 4

129 3

130 3

131 2

132 6

133 10

134 9

135 6

136 16

137 23

138 31

139 28

140 20

141 5

142 5

143 5

144 5

145 3

146 1

147 3

148 3

149 5

150 2

151 5

152 1

153 5

154 5

155 11

156 9

157 1

158 6

159 4

160 6

161 2

162 4

163 9

164 11

165 5

166 2

167 6

168 3

169 12

170 8

171 3

172 4

173 3

174 4

175 2

176 1

178 4

179 6

180 2

181 1

182 3

183 1

184 2

185 4

186 7

187 9

188 5

189 2

191 3

192 6

193 8

194 7

195 1

197 4

198 1

199 1

200 5

201 8

202 6

203 2

204 5

205 1

206 7

207 3

208 10

209 1

210 9

211 3

212 9

213 5

214 11

215 5

217 2

218 3

219 1

220 1

221 1

224 1

225 1

232 1

234 3

235 9

236 8

237 17

238 16

239 4

240 3

241 13

242 8

243 3

244 8

245 9

246 4

247 2

248 3

249 1

250 1

254 1

255 1

At the 25 percentile, max mutual difference = 36; percent mutual agreement = 92.32%

At the 50 percentile, max mutual difference = 138; percent mutual agreement = 70.58%

At the 75 percentile, max mutual difference = 187; percent mutual agreement = 60.13%

At the 90 percentile, max mutual difference = 235; percent mutual agreement = 49.89%

Table 5.6: Distribution of commonness Percentage

1 4035

2 594

3 159

4 222

5 235

6 108

7 89

8 14

9 25

10 187

11 162

12 236

13 358

14 359

15 185

16 455

17 391

18 15

19 240

20 1020

Table 5.7: Distribution of Mutual Genealogical Affinity Percentage between all witnesses

Distribution of Witnesses by Mutual Affinity between all witnesses:

% Affinity Number of Witnesses

1 1884

2 43

3 34

4 157

5 207

6 156

7 205

8 256

9 270

10 811

11 447

12 817

13 777

14 869

15 718

16 589

17 435

18 501

19 271

20 706

Table 5.7: Distribution of Witnesses by Mutual Affinity between all witnesses with greater than 80% content:

% Affinity Number of Witnesses

1 0

2 0

3 0

4 0

5 0

6 0

7 0

8 0

9 5

10 113

11 75

12 200

13 147

14 90

15 66

16 35

17 35

18 3

19 49

20 217

Mean Mutual Affinity= 70.87

Table 6.5: Distribution Extant Witnesses by Genealogical Affinity with Parent Exemplar

Distribution of Extant Witnesses by Affinity with Parent:

% Affinity Number of Witnesses

1 0

2 0

3 0

4 0

5 0

6 0

7 0

8 0

9 0

10 0

11 0

12 0

13 0

14 0

15 0

16 1

17 1

18 3

19 6

20 35

Total 4.60000000000000E+0001

Table 6.6: Distribution Exemplars by Genealogical Affinity with Parent Exemplar

Distribution of Exemplars by Affinity with Parent:

% Affinity Number of Witnesses

1 0

2 0

3 0

4 0

5 0

6 0

7 0

8 0

9 0

10 0

11 0

12 0

13 0

14 0

15 0

16 0

17 4

18 5

19 3

20 11

Table 6.1: Distribution of Extant Witnesses by Generation Depth

Generation Number of Witnesses

2 30

3 30

4 30

5 33

6 17

7 3

Appendix B: Index of reference for each variation unit

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414- 15:14,1 415- 15:14,2 416- 15:15,1 417- 15:17,1 418- 15:20,1 419- 15:24,1 420- 15:25,1

421- 15:27,1 422- 15:28,1 423- 15:28,2 424- 15:28,3 425- 15:29,1 426- 15:31,1 427- 15:31,2

428- 15:31,3 429- 15:34,1 430- 15:37,1 431- 15:45,1 432- 15:45,2 433- 15:47,1 434- 15:47,2

435- 15:49,1 436- 15:50,1 437- 15:50,2 438- 15:51,1 439- 15:51,2 440- 15:51,3 441- 15:52,1

442- 15:52,2 443- 15:54,1 444- 15:54,2 445- 15:54,3 446- 15:54,4 447- 16:2,1 448- 16:2,2

449- 16:3,1 450- 16:4,1 451- 16:6,1 452- 16:6,2 453- 16:6,3 454- 16:7,1 455- 16:8,1

456- 16:10,1 457- 16:12,1 458- 16:15,1 459- 16:15,2 460- 16:17,1 461- 16:17,2 462- 16:19,1

463- 16:19,2 464- 16:19,3 465- 16:19,4 466- 16:19,5 467- 16:22,1 468- 16:23,1 469- 16:24,1

Appendix C: Genealogical Tree Diagram

Genealogical Tree of C:\Genology\_Delphi\Geneology 10\07 1Cor.var

 |-Autograph[0.00]<0>{AD 65}/0/0/0

 |-Ex-166#[0.84]<1>{AD 70}/65/65/2

 | |-P^34%[1.00]<2>{AD 650}/0/65/1

 | |-D06^1[0.72]<2>{AD 600}/95/65/6

 | |-088%[0.82]<2>{AD 500}/2/65/2

 | |-1241\*%[1.00]<2>{AD 1150}/0/65/1

 | |-it-e%[0.99]<2>{AD 450}/3/65/3

 | |-BasA%[1.00]<2>{AD 374}/0/65/1

 | |-Did^b%[1.00]<2>{AD 398}/0/65/1

 | |-Hier^a%[0.50]<2>{AD 420}/1/65/2

 | |-Hipp%[1.00]<2>{AD 235}/0/65/1

 | |-McionA%[0.00]<2>{AD 150}/1/65/2

 | |-Or^lat^a%[1.00]<2>{AD 254}/0/65/1

 | |-Ex-163[0.99]<2>{AD 120}/5/65/3

 | | |-vg^b[0.87]<3>{AD 400}/51/5/6

 | | |-P^61%[0.82]<3>{AD 700}/2/5/2

 | | |-Cl^a%[0.55]<3>{AD 215}/25/5/6

 | | |-Cl^b%[0.47]<3>{AD 215}/31/5/6

 | | |-Did^a%[0.60]<3>{AD 398}/2/5/2

 | | |-Epiph^a%[0.70]<3>{AD 403}/7/5/4

 | | |-Epiph^b%[0.68]<3>{AD 403}/8/5/5

 | | |-Eus^a%[0.57]<3>{AD 339}/3/5/3

 | | |-Eus^b%[0.71]<3>{AD 339}/2/5/3

 | | |-Irlat^a%[0.65]<3>{AD 395}/12/5/5

 | | |-Ex-159[0.99]<3>{AD 170}/5/5/3

 | | |-vg\*[1.00]<4>{AD 400}/0/5/1

 | | |-vg^a[1.00]<4>{AD 400}/0/5/1

 | | |-vg^cl[0.97]<4>{AD 1592}/13/5/5

 | | |-vg^st[0.99]<4>{AD 1994}/5/5/3

 | | |-Irlat^b%[0.60]<4>{AD 395}/2/5/3

 | | |-Meth%[0.83]<4>{AD 250}/1/5/2

 | | |-Tert%[0.54]<4>{AD 220}/13/5/6

 | |-Ex-162[0.99]<2>{AD 75}/6/65/3

 | |-it-f\*[0.98]<3>{AD 550}/7/6/4

 | |-D06^c%[0.75]<3>{AD 900}/81/6/8

 | |-it-r%[0.90]<3>{AD 700}/15/6/5

 | |-Ir%[0.50]<3>{AD 150}/2/6/2

 | |-Ptol^Ir%[0.33]<3>{AD 180}/2/6/2

 | |-Ex-160[0.95]<3>{AD 80}/21/6/5

 | |-it-d[0.98]<4>{AD 450}/6/21/5

 | |-Ex-156[0.96]<4>{AD 100}/15/21/3

 | |-it-ar[0.90]<5>{AD 950}/38/15/12

 | |-it-b\*[0.94]<5>{AD 450}/26/15/7

 | |-D06\*[0.68]<5>{AD 550}/124/15/10

 | |-F\*[0.70]<5>{AD 850}/118/15/13

 | |-G012\*[0.69]<5>{AD 850}/120/15/15

 | |-G012^c[0.70]<5>{AD 900}/118/15/15

 | |-Ambst%[0.66]<5>{AD 366}/41/15/10

 | |-Cyp^a%[0.74]<5>{AD 258}/6/15/4

 | |-McionE%[0.50]<5>{AD 150}/2/15/2

 | |-Pel%[0.69]<5>{AD 418}/8/15/5

 | |-Spec%[0.53]<5>{AD 450}/7/15/4

 |-Ex-155#[0.86]<1>{AD 175}/66/66/2

 | |-01^2[0.95]<2>{AD 650}/21/66/6

 | |-01^c%[0.95]<2>{AD 1150}/20/66/4

 | |-H015\*%[0.92]<2>{AD 550}/1/66/2

 | |-H015^c%[0.85]<2>{AD 600}/2/66/3

 | |-it-t%[0.88]<2>{AD 1000}/13/66/4

 | |-Ex-152[0.87]<2>{AD 225}/59/66/4

 | |-044\*[0.94]<3>{AD 1000}/29/59/6

 | |-Ex-151[0.91]<3>{AD 275}/44/59/8

 | |-l^249[0.99]<4>{AD 850}/7/44/5

 | |-D06^2[0.75]<4>{AD 850}/107/44/11

 | |-075%[0.95]<4>{AD 500}/2/44/3

 | |-sy^h%[0.89]<4>{AD 616}/40/44/7

 | |-Ex-149[1.00]<4>{AD 325}/1/44/2

 | |-l^2211\*[1.00]<5>{AD 995}/0/1/1

 | |-69[1.00]<5>{AD 1450}/2/1/2

 | |-309[1.00]<5>{AD 1250}/1/1/1

 | |-323\*[0.99]<5>{AD 1150}/4/1/3

 | |-326[0.95]<5>{AD 950}/22/1/9

 | |-491[1.00]<5>{AD 1050}/1/1/1

 | |-614\*[0.97]<5>{AD 1250}/14/1/6

 | |-629[0.93]<5>{AD 1350}/35/1/10

 | |-1611[1.00]<5>{AD 950}/1/1/2

 | |-2138[1.00]<5>{AD 1072}/1/1/2

 | |-pm^b[0.99]<5>{AD 850}/4/1/2

 | |-l^846[0.99]<5>{AD 850}/3/1/2

 | |-l^1575[1.00]<5>{AD 850}/1/1/2

 | |-l^2211^c[1.00]<5>{AD 995}/0/1/1

 | |-TR[0.98]<5>{AD 1892}/10/1/6

 | |-HF[0.99]<5>{AD 1982}/3/1/4

 | |-RP[0.99]<5>{AD 2005}/4/1/4

 | |-Ex-146[1.00]<5>{AD 375}/1/1/2

 | | |-pm^a[1.00]<6>{AD 850}/0/1/1

 | | |-l\*[1.00]<6>{AD 850}/0/1/1

 | | |-sy^p%[0.81]<6>{AD 425}/68/1/9

 | |-Ex-148[0.98]<5>{AD 700}/10/1/5

 | | |-945[0.99]<6>{AD 1050}/7/10/5

 | | |-6[0.82]<6>{AD 1250}/84/10/10

 | | |-L019\*%[0.92]<6>{AD 750}/19/10/5

 | |-Ex-145[1.00]<5>{AD 1000}/1/1/1

 | |-1[1.00]<6>{AD 1150}/0/1/1

 | |-42[1.00]<6>{AD 1050}/0/1/1

 | |-131\*[1.00]<6>{AD 1350}/1/1/1

 | |-440[1.00]<6>{AD 1150}/0/1/1

 | |-2495[1.00]<6>{AD 1450}/2/1/3

 |-Ex-165#[0.93]<1>{AD 75}/32/32/2

 |-P^15%[0.76]<2>{AD 250}/9/32/3

 |-K\*%[0.92]<2>{AD 850}/14/32/3

 |-048%[0.93]<2>{AD 450}/7/32/4

 |-0199%[1.00]<2>{AD 700}/0/32/1

 |-0222%[1.00]<2>{AD 550}/0/32/1

 |-0285%[0.83]<2>{AD 550}/2/32/3

 |-0289%[0.86]<2>{AD 1300}/7/32/4

 |-NA-27[0.93]<2>{AD 1979}/32/32/4

 |-it-g%[0.92]<2>{AD 800}/18/32/5

 |-sa^a%[0.87]<2>{AD 250}/41/32/6

 |-sa^b%[0.92]<2>{AD 250}/23/32/5

 |-bo^a%[0.89]<2>{AD 250}/34/32/5

 |-bo^b%[0.87]<2>{AD 250}/43/32/5

 |-Hier^b%[1.00]<2>{AD 420}/0/32/1

 |-Ex-164[0.90]<2>{AD 150}/47/32/4

 | |-P^46^c[0.77]<3>{AD 200}/100/47/8

 | |-P^46\*[0.76]<3>{AD 200}/105/47/5

 | |-P^46^1[0.77]<3>{AD 200}/102/47/8

 | |-P^46^2[0.77]<3>{AD 200}/101/47/8

 | |-0185%[1.00]<3>{AD 350}/0/47/1

 | |-0201%[0.81]<3>{AD 450}/4/47/3

 | |-Or^b%[0.82]<3>{AD 254}/3/47/3

 | |-Ex-158[0.89]<3>{AD 204}/51/47/7

 | |-B^c[1.00]<4>{AD 350}/0/51/1

 | |-B^2[0.99]<4>{AD 600}/7/51/3

 | |-I%[0.90]<4>{AD 450}/2/51/3

 | |-0270%[0.86]<4>{AD 500}/1/51/2

 | |-Or^a%[0.76]<4>{AD 254}/4/51/4

 | |-Ex-144[0.99]<4>{AD 300}/4/51/3

 | |-B\*[1.00]<5>{AD 350}/0/4/1

 | |-B^1[1.00]<5>{AD 350}/0/4/1

 |-Ex-161[0.97]<2>{AD 80}/16/32/4

 |-P025\*%[0.88]<3>{AD 850}/37/16/7

 |-81\*%[0.88]<3>{AD 1044}/43/16/8

 |-104\*%[0.90]<3>{AD 1087}/30/16/6

 |-1175\*%[0.88]<3>{AD 950}/41/16/7

 |-1175^c%[0.88]<3>{AD 1000}/41/16/7

 |-1505\*%[0.85]<3>{AD 1150}/39/16/7

 |-2464\*%[0.91]<3>{AD 850}/26/16/7

 |-Ex-157[0.89]<3>{AD 100}/52/16/5

 | |-A\*[1.00]<4>{AD 450}/2/52/2

 | |-A^c[0.99]<4>{AD 550}/6/52/3

 | |-P^11%[0.84]<4>{AD 550}/8/52/3

 | |-0278%[1.00]<4>{AD 850}/0/52/1

 | |-Irarm%[0.60]<4>{AD 400}/2/52/3

 | |-Lcf%[0.60]<4>{AD 371}/2/52/3

 | |-McionT%[0.33]<4>{AD 150}/2/52/3

 |-Ex-154[0.97]<3>{AD 300}/13/16/5

 |-01\*[0.95]<4>{AD 350}/23/13/5

 |-01^1%[0.95]<4>{AD 550}/20/13/6

 |-C\*%[0.86]<4>{AD 450}/45/13/8

 |-C^1%[0.87]<4>{AD 450}/40/13/9

 |-C^2%[0.86]<4>{AD 550}/42/13/9

 |-C^3%[0.82]<4>{AD 850}/59/13/10

 |-Ex-153[0.93]<4>{AD 500}/32/13/9

 |-33\*[0.90]<5>{AD 850}/47/32/9

 |-365%[0.89]<5>{AD 1150}/32/32/8

 |-1506%[0.93]<5>{AD 1320}/4/32/2

 |-Ex-150[0.85]<5>{AD 550}/72/32/11

 |-1739^c[0.99]<6>{AD 950}/5/72/4

 |-1739\*[0.97]<6>{AD 900}/15/72/5

 |-0121%[0.89]<6>{AD 950}/3/72/3

 |-0243\*%[0.94]<6>{AD 950}/7/72/5

 |-0243^c%[0.93]<6>{AD 1000}/9/72/7

 |-630%[0.91]<6>{AD 1300}/27/72/7

 |-Ex-147[0.81]<6>{AD 600}/88/72/9

 |-1881^c[0.99]<7>{AD 1400}/3/88/3

 |-1881\*[0.99]<7>{AD 1350}/4/88/5

 |-P^68%[1.00]<7>{AD 650}/0/88/1

The readings of the Autograph are based on the consensus of the following ancient exemplars:

Ex-155# Ex-165# Ex-166#

Appendix D: Summary of the autograph:

Variants of the autograph; Number in last column is probability of reading:

1.1 1:1,1.1 êklhtoj 1.00

2.1 1:1,2.1 âCristou VIhsouß 0.67

3.1 1:2,1.1 âth oush evn Lorinqw hgiasmenoij evn Cristw VIhsouß 1.00

4.1 1:2,2.1 Þ omit 0.50

5.1 1:4,1.1 Ýmou 1.00

6.1 1:6,1.1 ÝCristou 1.00

7.1 1:8,1.1 äewj telouj 1.00

8.1 1:8,2.1 Ýhmera 1.00

9.1 1:8,3.1 êCristou 1.00

10.1 1:9,1.1 ÝdiV 1.00

11.1 1:10,1.1 Ýscismata 1.00

12.1 1:11,1.1 êmou 1.00

13.1 1:13,1.1 Þ omit 1.00

14.1 1:13,2.1 Ýmh 1.00

15.1 1:13,3.1 àuper 1.00

16.1 1:14,1.1 ätw qew 0.67

17.1 1:15,1.1 Ýevbaptisqhte 1.00

18.1 1:16,1.1 êallon 1.00

19.1 1:17,1.1 Þ omit 1.00

20.1 1:17,2.1 Ýeuvaggelizesqai 1.00

21.1 1:17,3.1 àlogou 1.00

22.1 1:18,1.1 êo 1.00

23.1 1:18,2.1 êmen 1.00

24.1 1:18,3.1 êhmin 1.00

25.1 1:20,1.1 Þ omit 0.50

26.1 1:22,1.1 êkai 1.00

27.1 1:23,1.1 Ýeqnesin 1.00

28.1 1:24,1.1 äCriston qeou dunamin kai qeou sofian 1.00

29.1 1:26,1.1 Ýgar 1.00

30.2 1:28,1.2 kai 0.67

31.2 1:29,1.2 autou 0.67

32.1 1:30,1.1 ädikaiosunh te 1.00

33.1 2:1,1.1 Ýmusthrion 0.67

34.2 2:2,1.2 2 1 1.00

35.1 2:4,1.1 äpeiqoij sofiaj logoij 0.50

36.1 2:4,2.1 Ýavpodeixei 1.00

37.1 2:8,1.1 Ýegnwken 1.00

38.1 2:8,2.1 Þ omit 1.00

39.1 2:9,1.1 Ýa 1.00

40.1 2:10,1.1 Ýde 1.00

41.2 2:10,2.2 autou 0.67

42.1 2:11,1.1 êavnqrwpwn 1.00

43.1 2:11,2.1 äto pneuma tou avnqrwpou 1.00

44.1 2:12,1.1 Þ omit 1.00

45.1 2:12,2.1 Ýeivdwmen 1.00

46.1 2:13,1.1 Þ omit 1.00

47.1 2:13,2.1 Ýpneumatikoij 1.00

48.1 2:14,1.1 ètou qeou 1.00

49.1 2:15,1.1 äta panta 0.50

50.1 2:16,1.1 ÝCristou 1.00

51.1 3:1,1.1 Ýsarkinoij 1.00

52.1 3:2,1.1 êeti 1.00

53.1 3:3,1.1 Ýsarkikoi 1.00

54.1 3:3,2.1 Þ omit 1.00

55.1 3:3,3.1 àsarkikoi 1.00

56.1 3:4,1.1 äouvk anqrwpoi 0.50

57.1 3:4,2.1 Þ omit 1.00

58.1 3:5,1.1 ÝUi 0.67

59.1 3:5,2.1 Ýti 0.67

60.1 3:5,3.1 âVApollwj Ýti de evstin Qaulojß 1.00

61.1 3:5,4.1 Þ omit 1.00

62.1 3:10,1.1 ètou qeou 1.00

63.1 3:10,2.1 Ýeqhka 0.50

64.2 3:12,1.2 touton 0.67

65.1 3:12,2.1 äcruson arguron 1.00

66.1 3:13,1.1 äekastou to ergon faneron genhsetai 1.00

67.2 3:13,2.2 ê omit 0.67

68.1 3:14,1.1 Ýmenei 1.00

69.1 3:16,1.1 âoivkei evn uminß 1.00

70.1 3:17,1.1 Ýfqerei 1.00

71.1 3:17,2.1 àtouton 1.00

72.1 3:18,1.1 Þ omit 1.00

73.1 3:20,1.1 Ýsofwn 1.00

74.1 4:2,1.1 Ýwde 1.00

75.1 4:2,2.1 àzhteitai 0.67

76.1 4:5,1.1 êoj 1.00

77.1 4:6,1.1 Ýa 0.67

78.1 4:6,2.1 Þ omit 0.67

79.1 4:9,1.1 Þ omit 0.67

80.1 4:10,1.1 ÝCristw 1.00

81.1 4:11,1.1 Ýgumniteuomen 1.00

82.1 4:13,1.1 Ýdusfhmoumenoi 0.50

83.1 4:13,2.1 äwj perikaqarmata 1.00

84.2 4:14,1.2 ðqetw 1.00

85.1 4:15,1.1 êgar 1.00

86.1 4:15,2.1 êVIhsou 1.00

87.1 4:16,1.1 Þ omit 1.00

88.1 4:17,1.1 Þ omit 1.00

89.1 4:17,2.1 äCristw VIhsou 1.00

90.1 5:1,1.1 Þ omit 0.67

91.1 5:2,1.1 Ýavrqh 1.00

92.1 5:2,2.1 àpraxaj 1.00

93.1 5:3,1.1 Þ omit 1.00

94.1 5:4,1.1 ähmwn VIhsou 1.00

95.1 5:4,2.1 æhmwn VIhsou 1.00

96.1 5:5,1.1 Þ omit 0.33

97.1 5:6,1.1 êPuv 1.00

98.1 5:6,2.1 Ýzumoi 1.00

99.1 5:7,1.1 Þ omit 0.67

100.1 5:7,2.1 ß omit 0.67

101.1 5:8,1.1 Ýmhde 1.00

102.1 5:8,2.1 àponhriaj 1.00

103.1 5:9,1.1 Ýsunanamignusqai 1.00

104.1 5:10,1.1 Þ omit 0.67

105.2 5:10,2.2 h; 0.67

106.1 5:10,3.1 àwvfeilete 1.00

107.1 5:11,1.1 Ýnun 1.00

108.1 5:11,2.1 àh 0.67

109.1 5:12,1.1 Þ omit 1.00

110.1 5:12,2.1 äouvci touj esw umeij krinete 1.00

111.1 5:13,1.1 Ýkrinei 1.00

112.1 5:13,2.1 àevxarate 1.00

113.1 6:1,1.1 Þ omit 1.00

114.1 6:2,1.1 êh 1.00

115.1 6:2,2.1 Ýkrinousin 0.67

116.1 6:5,1.1 Ýlegw 1.00

117.1 6:5,2.1 àeni 1.00

118.1 6:5,3.1 äouvdeij sofoj 1.00

119.1 6:5,4.1 Þ omit 1.00

120.1 6:7,1.1 êoun 1.00

121.1 6:7,2.1 Ýkrimata 1.00

122.1 6:8,1.1 Ýtouto 1.00

123.1 6:10,1.1 Ýouv 0.67

124.1 6:10,2.1 Þ omit 1.00

125.1 6:11,1.1 äVIhsou Cristou 0.67

126.1 6:14,1.1 Ýevxegerei 0.67

127.1 6:15,1.1 Þ omit 1.00

128.1 6:15,2.1 Ýumwn 1.00

129.1 6:15,3.1 àaraj 1.00

130.1 6:16,1.1 êh 1.00

131.1 6:19,1.1 äto swma 1.00

132.1 6:19,2.1 âagiou pneumatojß 1.00

133.1 6:20,1.1 Ýdh 1.00

134.1 6:20,2.1 Þ omit 1.00

135.1 7:1,1.1 Þ omit 0.67

136.1 7:2,1.1 ätaj porneiaj 0.67

137.1 7:2,2.1 èkai ekasth ton idion andra evcetw 1.00

138.1 7:3,1.1 Ýovfeilhn 1.00

139.1 7:5,1.1 êan 1.00

140.1 7:5,2.1 Þ omit 0.67

141.1 7:5,3.1 Ýhte 0.67

142.1 7:5,4.1 êumwn 1.00

143.1 7:7,1.1 Ýde 0.67

144.1 7:7,2.1 ào 0.50

145.1 7:7,3.1 ào 0.50

146.1 7:9,1.1 Ýgamhsai 1.00

147.1 7:10,1.1 Ýcwrisqhnai 1.00

148.1 7:13,1.1 äei tij 0.67

149.1 7:13,2.1 Ýoutoj 1.00

150.1 7:13,3.1 àsuneudokei 1.00

151.1 7:13,4.1 æton andra 0.67

152.1 7:14,1.1 Þ omit 0.67

153.1 7:14,2.1 Ýavdelfw 0.33

154.2 7:15,1.2 hmð 1.00

155.1 7:17,1.1 ÝEiv 1.00

156.1 7:17,2.1 àevmerisen 0.50

157.1 7:17,3.1 Ýkurioj 1.00

158.1 7:17,4.1 Ýqeoj 1.00

159.1 7:17,5.1 Ýdiatassomai 0.67

160.1 7:18,1.1 äkeklhtai tij 1.00

161.1 7:20,1.1 Þ omit 1.00

162.1 7:21,1.1 êkai 1.00

163.1 7:22,1.1 Þ omit 0.67

164.1 7:24,1.1 èpara qew 1.00

165.1 7:28,1.1 Ýgamhshj 1.00

166.1 7:28,2.1 êh 1.00

167.1 7:29,1.1 Þ omit 1.00

168.1 7:29,2.1 êto 1.00

169.1 7:31,1.1 äton kosmon 0.50

170.1 7:31,2.1 Ýkatacrwmenoi 0.67

171.1 7:32,1.1 Ýkuriw 0.67

172.1 7:34,1.1 äkai memeristai kai 1.00

173.4 7:34,2.4 1&5 1 2 0.67

174.1 7:34,3.1 êkai 1.00

175.1 7:34,4.1 èta tou kosmou 1.00

176.1 7:35,1.1 êauvtwn 0.67

177.1 7:35,2.1 Ýsumforon 0.67

178.1 7:35,3.1 àavperispastwj 1.00

179.1 7:36,1.1 Ýgameitwsan 1.00

180.1 7:37,1.1 äevn th kardia auvtou edraioj 0.67

181.1 7:37,2.1 êevn 1.00

182.1 7:38,1.1 Ýgamizwn 0.50

183.1 7:38,2.1 äthn eautou parqenon 1.00

184.1 7:38,3.1 àpoiei 1.00

185.1 7:38,4.1 Ýgamizwn 0.50

186.1 7:39,1.1 Þ omit 0.67

187.1 7:39,2.1 ß omit 1.00

188.1 7:39,3.1 Ýkoimhqh 1.00

189.1 7:40,1.1 Ýmakariwtera 1.00

190.1 7:40,2.1 àde 1.00

191.1 7:40,3.1 Ýqeou 1.00

192.1 7:40,4.1 Ýecein 1.00

193.1 8:1,1.1 Þ omit 1.00

194.1 8:2,1.1 Þ omit 1.00

195.1 8:2,2.1 Ýevgnwkenai 0.67

196.1 8:2,3.1 êti 1.00

197.1 8:2,4.1 àoupw 1.00

198.1 8:3,1.1 èton qeon 1.00

199.1 8:3,2.1 èupV auvtou 1.00

200.1 8:4,1.1 Þ omit 0.67

201.1 8:6,1.1 êavllV 1.00

202.1 8:6,2.1 Ýou 1.00

203.1 8:6,3.1 Þ omit 1.00

204.2 8:7,1.2 suneidhsei 0.67

205.1 8:7,2.1 äavsqenhj ousa 1.00

206.1 8:8,1.1 Ýhmaj 1.00

207.2 8:8,2.2 paristhsi 0.67

208.2 8:8,3.2 6&9 1&5 1.00

209.1 8:10,1.1 êse 0.67

210.3 8:11,1.3 kai ap) 0.67

211.1 8:11,2.1 æevn th sh gnwsei o avdelfoj 1.00

212.1 8:12,1.1 êavsqenousan 1.00

213.1 8:13,1.1 êmou 1.00

214.1 8:13,2.1 êmou 1.00

215.1 9:1,1.1 âevleuqeroj ouvk eivmi avpostolojß 1.00

216.1 9:2,1.1 ämou thj 1.00

217.1 9:5,1.1 äavdelfhn gunaika 1.00

218.2 9:7,1.2 ek tou ðpou 0.67

219.1 9:7,2.1 êh 0.67

220.1 9:8,1.1 ätauta lalw 0.67

221.1 9:9,1.1 äevn gar tw Nwusewj nomw gegraptai 1.00

222.2 9:9,2.2 fimwð 1.00

223.1 9:10,1.1 äevpV evlpidi tou metecein 0.67

224.1 9:12,1.1 Ýevgkophn 0.67

225.1 9:13,1.1 êta 1.00

226.1 9:13,2.1 Ýparedreuontej 0.50

227.4 9:15,1.4 ina tij kenws 0.67

228.1 9:16,1.1 Ýkauchma 1.00

229.2 9:16,2.2 ðzwmai 0.67

230.1 9:17,1.1 Þ omit 1.00

231.1 9:18,1.1 ämou evstin 0.67

232.1 9:18,2.1 Þ omit 1.00

233.1 9:20,1.1 êwj 1.00

234.1 9:20,2.1 èmh wn auvtoj upo nomon 1.00

235.1 9:21,1.1 Ýqeou 1.00

236.1 9:21,2.1 ÝCristou 1.00

237.1 9:21,3.1 àkerdanw 0.50

238.1 9:21,4.1 êtouj 0.50

239.1 9:22,1.1 Þ omit 0.67

240.1 9:22,2.1 äpantwj tinaj 0.67

241.1 9:23,1.1 Ýpanta 1.00

242.1 9:25,1.1 êoun 1.00

243.1 10:2,1.1 Ýevbaptisqhsan 1.00

244.1 10:3,1.1 äto auvto 1.00

245.1 10:4,1.1 êauvto 1.00

246.1 10:4,2.1 âpetra deß 1.00

247.1 10:5,1.1 èo qeoj 1.00

248.1 10:8,1.1 Þ omit 0.67

249.1 10:8,2.1 Ýtreij 1.00

250.1 10:9,1.1 ÝCriston 0.67

251.1 10:9,2.1 àevpeirasan 1.00

252.1 10:9,3.1 Ýavpwllunto 1.00

253.1 10:10,1.1 Ýgogguzete 1.00

254.1 10:10,2.1 àkaqaper 1.00

255.3 10:11,1.3 tau) de pan) 0.67

256.1 10:11,2.1 ætupikwj sunebainen 1.00

257.1 10:13,1.1 äouvk eilhfen 0.67

258.1 10:13,2.1 Ýevasei 1.00

259.1 10:13,3.1 âumaj peirasqhnaiß 1.00

260.1 10:13,4.1 Þ omit 0.50

261.1 10:16,1.1 Ýeuvlogiaj 1.00

262.2 10:16,2.2 2&5 1 0.67

263.1 10:17,1.1 Þ omit 0.67

264.2 10:18,1.2 ouci 1.00

265.1 10:19,1.1 äti evstin 0.67

266.1 10:19,2.1 èh oti eidwlon äti evstin 0.67

267.1 10:19,3.1 äti evstin 0.67

268.2 10:20,1.2 q) ta eqnh 1.00

269.1 10:20,2.1 äkai ouv qew quousin 0.67

270.1 10:20,3.1 ækoinwnouj twn daimoniwn 1.00

271.1 10:23,1.1 Þ omit 0.67

272.1 10:23,2.1 Þ omit 0.67

273.1 10:24,1.1 Þ omit 1.00

274.1 10:27,1.1 Þ omit 0.67

275.1 10:27,2.1 äpan to paratiqemenon 1.00

276.1 10:28,1.1 Ýieroquton 0.67

277.1 10:28,2.1 èton mhnusanta kai thn suneidhsinÞ 1.00

278.1 10:28,3.1 Þ omit 1.00

279.1 10:29,1.1 Ýallhj 1.00

280.1 10:31,1.1 êpoieite 1.00

281.2 10:33,1.2 ðferon 0.67

282.1 11:2,1.1 Þ omit 0.67

283.1 11:2,2.1 ß omit 1.00

284.1 11:3,1.1 êo 1.00

285.1 11:5,1.1 Ýauvthj 1.00

286.1 11:9,1.1 Ýandra 1.00

287.1 11:10,1.1 Ýevxousian 1.00

288.1 11:14,1.1 Þ omit 1.00

289.1 11:15,1.1 êauvth 0.67

290.2 11:17,1.2 ðllw 0.67

291.2 11:17,2.2 nwn 0.67

292.1 11:19,1.1 èevn umin 0.67

293.2 11:19,2.2 ê omit 1.00

294.1 11:19,3.1 èevn umin 1.00

295.1 11:20,1.1 Ýoun 1.00

296.1 11:22,1.1 Ýevpainesw 0.67

297.1 11:22,2.1 êumaj 1.00

298.1 11:23,1.1 äavpo tou kuriou 0.67

299.1 11:23,2.1 êVIhsouj 1.00

300.1 11:23,3.1 Þ omit 1.00

301.1 11:24,1.1 Þ omit 1.00

302.1 11:24,2.1 âmou evstinß 0.67

303.1 11:24,3.1 êto 1.00

304.1 11:24,4.1 ß omit 0.50

305.1 11:25,1.1 äevmw aimati 1.00

306.1 11:26,1.1 Þ omit 0.67

307.1 11:27,1.1 Þ omit 1.00

308.1 11:27,2.1 ß omit 1.00

309.2 11:29,1.2 anaxiwj 0.67

310.2 11:29,2.2 tou kuriou 0.67

311.1 11:31,1.1 Ýde 0.50

312.1 11:32,1.1 êtou 1.00

313.1 11:34,1.1 Þ omit 0.67

314.1 12:2,1.1 äoti ote 1.00

315.1 12:2,2.1 Ýafwna 1.00

316.1 12:2,3.1 æwj an hgesqe 0.67

317.1 12:3,1.1 êlalwn 1.00

318.1 12:3,2.1 ä VAnaqema VIhsouj 0.67

319.1 12:3,3.1 æ Lurioj VIhsouj 1.00

320.1 12:6,1.1 äo de 1.00

321.1 12:6,2.1 æqeoj o evnergwn 0.67

322.1 12:9,1.1 Þ omit 0.67

323.1 12:9,2.1 Ýcarismata 0.67

324.1 12:9,3.1 àeni 0.67

325.1 12:10,1.1 äevnerghmata dunamewn 1.00

326.1 12:10,2.1 êde 0.67

327.1 12:10,3.1 êde 0.67

328.1 12:10,4.1 Ýdiakriseij 0.67

329.1 12:10,5.1 Þ omit 0.67

330.1 12:10,6.1 àermhneia 1.00

331.1 12:11,1.1 êivdia 0.67

332.1 12:12,1.1 Þ omit 0.67

333.1 12:13,1.1 Þ omit 1.00

334.1 12:13,2.1 äpneuma evpotisqhmen 1.00

335.1 12:18,1.1 Ýnuni 1.00

336.1 12:19,1.1 êta 1.00

337.1 12:20,1.1 êmen 1.00

338.1 12:21,1.1 êde 0.67

339.1 12:24,1.1 Þ omit 1.00

340.1 12:24,2.1 Ýusteroumenw 0.50

341.1 12:25,1.1 Ýscisma 0.67

342.1 12:26,1.1 Ýeite 0.67

343.1 12:26,2.1 êen 0.67

344.1 12:27,1.1 Ýmerouj 1.00

345.1 12:31,1.1 Ýmeizona 0.67

346.1 12:31,2.1 àeti 1.00

347.1 13:2,1.1 Ýmeqistanai 0.50

348.1 13:3,1.1 Ýkauchswmai 0.67

349.1 13:4,1.1 èh avgaph 0.67

350.1 13:5,1.1 Ýavschmonei 1.00

351.1 13:5,2.1 àta 1.00

352.2 13:8,1.2 ekpipð 0.67

353.1 13:8,2.1 äprofhteiai katarghqhsontai 1.00

354.1 13:8,3.1 ægnwsij katarghqhsetai 1.00

355.1 13:10,1.1 Þ omit 1.00

356.1 13:11,1.1 Þ omit 0.67

357.1 13:12,1.1 ädiV evsoptrou 1.00

358.1 13:13,1.1 âpistij evlpij avgaph ta tria tautaß 1.00

359.1 14:2,1.1 Þ omit 0.50

360.1 14:2,2.1 Ýpneumati 1.00

361.1 14:4,1.1 Þ omit 1.00

362.1 14:5,1.1 Ýdiermhneuh 1.00

363.1 14:6,1.1 êevn 1.00

364.1 14:7,1.1 ätoij fqoggoij 1.00

365.1 14:8,1.1 âsalpigx fwnhnß 0.67

366.1 14:10,1.1 Þ omit 0.67

367.1 14:11,1.1 êevn 0.67

368.1 14:12,1.1 Ýpneumatwn 1.00

369.1 14:12,2.1 àperisseuhte 1.00

370.1 14:13,1.1 ÝDio 0.50

371.1 14:14,1.1 êgar 1.00

372.1 14:15,1.1 Ýproseuxomai 1.00

373.1 14:15,2.1 àproseuxomai 1.00

374.1 14:15,3.1 êde 0.67

375.1 14:16,1.1 Ýeuvloghj 1.00

376.1 14:16,2.1 àevn 0.50

377.1 14:18,1.1 Þ omit 0.67

378.2 14:18,2.2 ðssh 1.00

379.1 14:18,3.1 àlalw 1.00

380.1 14:19,1.1 ätw noi mou 1.00

381.1 14:21,1.1 Ýevn 1.00

382.1 14:21,2.1 àeterwn 0.67

383.1 14:23,1.1 Ýsunelqh 1.00

384.1 14:25,1.1 Þ omit 1.00

385.1 14:25,2.1 Ýkardiaj 1.00

386.1 14:25,3.1 êo 1.00

387.2 14:26,1.2 umwn 0.67

388.1 14:28,1.1 Ýdiermhneuthj 1.00

389.1 14:31,1.1 Ýpantej 1.00

390.1 14:32,1.1 Ýpneumata 1.00

391.1 14:33,1.1 äo qeoj 1.00

392.1 14:34,1.1 äai gunaikej 1.00

393.1 14:34,2.1 Þ evn taij evkklhsiaij sigatwsan ouv gar 1.00

394.1 14:34,3.1 Ýevpitrepetai 1.00

395.1 14:34,4.1 àupotassesqwsan 0.67

396.1 14:34,5.1 ß omit 1.00

397.1 14:34,6.1 Ýmaqein 1.00

398.1 14:34,7.1 êevstin 1.00

399.1 14:37,1.1 äkuriou evstin evntolh 0.67

400.1 14:38,1.1 Ýavgnoeitai 0.67

401.2 14:39,1.2 ê omit 1.00

402.1 14:39,2.1 êto 1.00

403.2 14:39,3.2 3 1 2 0.67

404.1 14:40,1.1 Þ omit 1.00

405.1 15:2,1.1 äeiv katecete 1.00

406.1 15:3,1.1 èo kai parelabon 1.00

407.1 15:5,1.1 Ýeita 0.67

408.1 15:5,2.1 àdwdeka 0.67

409.1 15:6,1.1 Þ omit 0.67

410.1 15:7,1.1 Ýeita 0.50

411.1 15:10,1.1 äouv kenh evgenhqh 1.00

412.1 15:10,2.1 êh 0.67

413.1 15:12,1.1 âoti evk nekrwnß 1.00

414.2 15:14,1.2 ê omit 1.00

415.1 15:14,2.1 Ýumwn 1.00

416.1 15:15,1.1 èeiper ara nekroi ouvk evgeirontai 1.00

417.1 15:17,1.1 Þ omit 1.00

418.1 15:20,1.1 Þ omit 1.00

419.1 15:24,1.1 Ýparadidw 0.67

420.1 15:25,1.1 Þ omit 1.00

421.1 15:27,1.1 êoti 0.67

422.1 15:28,1.1 êkai 1.00

423.1 15:28,2.1 èo uioj 1.00

424.1 15:28,3.1 êta 0.50

425.1 15:29,1.1 Ýauvtwn 1.00

426.1 15:31,1.1 Ýumeteran 1.00

427.1 15:31,2.1 êavdelfoi 1.00

428.1 15:31,3.1 äCristw VIhsou tw kuriw hmwn 1.00

429.1 15:34,1.1 Ýlalw 1.00

430.1 15:37,1.1 Ýgenhsomenon 1.00

431.1 15:45,1.1 êanqrwpoj 1.00

432.1 15:45,2.1 êVAdam 1.00

433.1 15:47,1.1 Ýanqrwpoj 0.67

434.1 15:47,2.1 Þ omit 0.67

435.2 15:49,1.2 ðswmen 1.00

436.1 15:50,1.1 Ýde 1.00

437.2 15:50,2.2 kl) ou ðantai 1.00

438.1 15:51,1.1 Þ omit 1.00

439.2 15:51,2.2 men 1.00

440.1 15:51,3.1 äouv koimhqhsomeqa pantej de 0.67

441.1 15:52,1.1 Ýriph 1.00

442.1 15:52,2.1 àevgerqhsontai 1.00

443.1 15:54,1.1 äto fqarton touto evndushtai avfqarsian kai to qnhton touto evndushtai Þ avqanasian 0.67

444.1 15:54,2.1 Ýnikoj 1.00

445.1 15:54,3.1 æÝnikoj pou sou qanate to kentron 0.67

446.1 15:54,4.1 Ýnikoj 1.00

447.1 16:2,1.1 Ýsabbatou 0.67

448.1 16:2,2.1 àeuvodwtai 0.50

449.1 16:3,1.1 äevan dokimashte 1.00

450.1 16:4,1.1 âaxion hß 1.00

451.1 16:6,1.1 êde 1.00

452.1 16:6,2.1 Ýparamenw 1.00

453.1 16:6,3.1 äh kai 1.00

454.1 16:7,1.1 Ýgar 1.00

455.1 16:8,1.1 Ýevpimenw 1.00

456.1 16:10,1.1 Ýkavgw 1.00

457.1 16:12,1.1 Þ omit 1.00

458.1 16:15,1.1 Þ omit 0.67

459.1 16:15,2.1 ÝVAcaiaj 1.00

460.2 16:17,1.2 umwn 1.00

461.1 16:17,2.1 àoutoi 0.67

462.1 16:19,1.1 èVAspazontai umaj 1.00

463.1 16:19,2.1 èai evkklhsiai thj VAsiaj 1.00

464.1 16:19,3.1 Ýavspazetai umaj 1.00

465.1 16:19,4.1 àQriska 0.67

466.1 16:19,5.1 Þ omit 1.00

467.1 16:22,1.1 ämarana qa 1.00

468.2 16:23,1.2 Cristou 0.67

469.2 16:24,1.2 amhn 1.00

Table 7.6: Distribution of probabilities of Autographic readings:

Probability Number of Variants

.1 0

.2 0

.3 2

.4 0

.5 27

.6 132

.7 0

.8 0

.9 0

.10 308

Table 7.4: Summary of how exemplar readings were selected, globally:

(1) by greatest probability: 9840

(2) by deferred ambiguity : 775

(4) by default to NA-27 : 134

(5) by arbitrary choice : 7

(6) by language deference : 61

Total : 10817

Table 7.9: How Autograph agrees with NA-27 Lemma (Lemma readings always = 1)

Number of Variant 1 = 429

Number of Variant 2 = 36

Number of Variant 3 = 2

Number of Variant 4 = 2

Autograph agrees with NA-27 91.47% of the time.

Probability that Autograph is original = 0.87

Appendix E: List of Autographic Variants that differ from the NA-27 text:

1:28,1.2 At NA-27 => Þ omit insert => kai [0.67]

1:29,1.2 Replace NA-27 => ätou qeou with => autou [0.67]

2:2,1.2 Replace NA-27 => äti eivdenai with => 2 1 [1.00]

2:10,2.2 At NA-27 => Þ omit insert => autou [0.67]

3:12,1.2 At NA-27 => Þ omit insert => touton [0.67]

3:13,2.2 Omit NA-27 => ê auto [0.67]

4:14,1.2 Replace NA-27 => Ýnouqetwn with => ðqetw [1.00]

5:10,2.2 Replace NA-27 => Ýkai with => h; [0.67]

7:15,1.2 Replace NA-27 => Ýumaj with => hmð [1.00]

7:34,2.4 Replace NA-27 => æh agamoj kai h parqenoj with => 1&5 1 2 [0.67]

8:7,1.2 Replace NA-27 => Ýsunhqeia with => suneidhsei [0.67]

8:8,2.2 Replace NA-27 => àparasthsei with => paristhsi [0.67]

8:8,3.2 Replace NA-27 => äoute evan mh fagwmen usteroumeqa oute evan fagwmen perisseuomen with => 6&9 1&5 [1.00]

8:11,1.3 Replace NA-27 => äavpollutai gar with => kai ap) [0.67]

9:7,1.2 Replace NA-27 => äton karpon with => ek tou ðpou [0.67]

9:9,2.2 Replace NA-27 => Ýkhmwseij with => fimwð [1.00]

9:15,1.4 Replace NA-27 => æouvdeij kenwsei with => ina tij kenws [0.67]

9:16,2.2 Replace NA-27 => àeuvaggeliswmai with => ðzwmai [0.67]

10:11,1.3 Replace NA-27 => ätauta de with => tau) de pan) [0.67]

10:16,2.2 Transpose NA-27 => âevstin tou aimatoj tou Cristouß to => 2&5 1 [0.67]

10:18,1.2 Replace NA-27 => Ýouvc with => ouci [1.00]

10:20,1.2 Replace NA-27 => Ýquousin with => q) ta eqnh [1.00]

10:33,1.2 Replace NA-27 => Ýsumforon with => ðferon [0.67]

11:17,1.2 Replace NA-27 => Ýparaggellwn with => ðllw [0.67]

11:17,2.2 Replace NA-27 => àevpainw with => nwn [0.67]

11:19,2.2 Omit NA-27 => êkai [1.00]

11:29,1.2 At NA-27 => Þ omit insert => anaxiwj [0.67]

11:29,2.2 At NA-27 => ß omit insert => tou kuriou [0.67]

13:8,1.2 Replace NA-27 => Ýpiptei with => ekpipð [0.67]

14:18,2.2 Replace NA-27 => Ýglwssaij with => ðssh [1.00]

14:26,1.2 At NA-27 => Þ omit insert => umwn [0.67]

14:39,1.2 Omit NA-27 => êmou [1.00]

14:39,3.2 Replace NA-27 => ämh kwluete glwssaij with => 3 1 2 [0.67]

15:14,1.2 Omit NA-27 => êkai [1.00]

15:49,1.2 Replace NA-27 => Ýforesomen with => ðswmen [1.00]

15:50,2.2 Replace NA-27 => äklhronomhsai ouv dunatai with => kl) ou ðantai [1.00]

15:51,2.2 At NA-27 => ß omit insert => men [1.00]

16:17,1.2 Replace NA-27 => Ýumeteron with => umwn [1.00]

16:23,1.2 At NA-27 => Þ omit insert => Cristou [0.67]

16:24,1.2 At NA-27 => Þ omit insert => amhn [1.00]

Total = 40

Table 7.5: Frequency of Autographic Readings by Criterion

Number of Autographic variants decided by greatest probability= 385 82.09%

Number of Autographic variants decided by Choice of NA27 = 23 4.90%

Number of Autographic variants decided by arbitrary choice [1]= 0 0.00%

Number of Autographic variants decided by Language deference = 61 13.01%

Total = 469

Table 7.7: List of Autographic variants decided by default to NA27:

1:2,2.1 Þ omit [0.50]

1:20,1.1 Þ omit [0.50]

2:4,1.1 äpeiqoij sofiaj logoij [0.50]

2:15,1.1 äta panta [0.50]

3:4,1.1 äouvk anqrwpoi [0.50]

3:10,2.1 Ýeqhka [0.50]

4:13,1.1 Ýdusfhmoumenoi [0.50]

7:7,2.1 ào [0.50]

7:7,3.1 ào [0.50]

7:31,1.1 äton kosmon [0.50]

7:38,1.1 Ýgamizwn [0.50]

7:38,4.1 Ýgamizwn [0.50]

9:13,2.1 Ýparedreuontej [0.50]

9:21,3.1 àkerdanw [0.50]

9:21,4.1 êtouj [0.50]

10:13,4.1 Þ omit [0.50]

11:24,4.1 ß omit [0.50]

11:31,1.1 Ýde [0.50]

12:24,2.1 Ýusteroumenw [0.50]

13:2,1.1 Ýmeqistanai [0.50]

14:2,1.1 Þ omit [0.50]

14:13,1.1 ÝDio [0.50]

16:2,2.1 àeuvodwtai [0.50]

Table 7.8: List of Autographic variants decided by arbitrary choice:

Summary of Each Witness:

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms P^11% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-157; (2) Ex-168$; (3) Ex-169$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

1.0; 16.0; 35.0; 39.0; 42.0; 71.0; 89.0; 94.0; 96.0; 113.0; 125.0; 126.0; 135.0; 147.0; 156.0; 174.0; 188.0; 210.0; 225.0; 227.0; 244.0; 245.0; 246.0; 250.0; 256.0; 275.0; 305.0; 312.0; 322.0; 329.0; 330.0; 334.0; 335.0; 338.0; 347.0; 359.0; 369.0; 373.0; 379.0; 396.0; 399.0; 420.0; 426.0; 429.0; 433.0; 438.0; 442.0; 443.0; 448.0; 461.0; 462.0; 468.0; Total = 52

Variants different from Parent[1]: 1:17,3.2[Ex-168$]; 1:20,1.2[Ex-168$]; 2:11,1.1[Ex-169$]; 4:10,1.2; 5:7,1.2[Ex-168$]; 6:5,2.2[Ex-168$]; 6:11,1.1[Ex-168$]; 6:15,2.1[Ex-168$]; Count = 8

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms P^15% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-165#; (2) Ex-168$; (3) Ex-169$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

16.0; 30.0; 31.0; 41.0; 64.0; 67.0; 75.0; 105.0; 108.0; 115.0; 148.0; 156.0; 204.0; 207.0; 210.0; 218.0; 227.0; 250.0; 255.0; 262.0; 266.0; 281.0; 309.0; 310.0; 343.0; 352.0; 376.0; 387.0; 403.0; 410.0; 424.0; 468.0; Total = 32

Variants different from Parent[1]: 7:18,1.2[Ex-168$]; 7:20,1.2[Ex-168$]; 7:29,2.2[Ex-168$]; 7:34,2.1[Ex-169$]; 7:35,1.2[Ex-168$]; 7:35,3.2; 7:37,2.2; 7:38,3.2[Ex-168$]; 7:40,3.2[Ex-168$]; Count = 9

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms P^34% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-166#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

77.0; 96.0; 123.0; 125.0; 126.0; 135.0; 136.0; 141.0; 152.0; 153.0; 159.0; 163.0; 170.0; 171.0; 173.0; 176.0; 195.0; 209.0; 219.0; 220.0; 229.0; 240.0; 257.0; 263.0; 265.0; 267.0; 269.0; 274.0; 276.0; 282.0; 289.0; 292.0; 296.0; 298.0; 302.0; 316.0; 318.0; 323.0; 326.0; 327.0; 328.0; 331.0; 338.0; 342.0; 345.0; 348.0; 349.0; 365.0; 367.0; 374.0; 377.0; 382.0; 395.0; 399.0; 407.0; 408.0; 412.0; 419.0; 421.0; 434.0; 440.0; 443.0; 458.0; 461.0; 465.0; Total = 65

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms P^46\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-164; (2) Ex-169$; (3) Ex-168$; (4) Ex-170$; (5) Ex-171$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

3.1; 5.1; 9.1; 15.1; 19.1; 22.1; 34.1; 40.1; 52.1; 92.1; 123.1; 126.1; 139.1; 150.1; 183.1; 184.1; 201.1; 208.1; 209.1; 243.1; 290.2; 291.2; 293.1; 296.1; 320.1; 326.1; 327.1; 342.1; 351.2; 371.1; 374.1; 378.1; 383.1; 398.1; 400.1; 402.1; 403.1; 421.1; 422.1; 437.1; 439.1; 444.1; 446.1; 453.1; 456.1; 464.1; 469.1; Total = 47

Variants different from Parent[1]: 1:8,1.3[Ex-169$]; 1:10,1.2[Ex-168$]; 1:11,1.2[Ex-169$]; 1:13,1.2[Ex-168$]; 1:13,2.2[Ex-168$]; 1:18,2.2[Ex-169$]; 1:22,1.2[Ex-168$]; 1:24,1.2[Ex-168$]; 2:4,1.5[Ex-170$]; 2:8,1.2[Ex-168$]; 2:8,2.2[Ex-168$]; 2:12,2.2[Ex-168$]; 3:3,2.2[Ex-169$]; 3:3,3.2[Ex-168$]; 3:5,1.2[Ex-168$]; 3:5,2.2[Ex-168$]; 3:10,1.2[Ex-168$]; 3:12,2.3[Ex-170$]; 3:13,2.2[Ex-168$]; 4:11,1.2[Ex-169$]; 4:15,1.2[Ex-168$]; 5:4,1.3[Ex-169$]; 5:4,2.2[Ex-168$]; 5:10,2.2[Ex-169$]; 5:12,2.2[Ex-168$]; 5:13,2.2[Ex-168$]; 6:7,1.2[Ex-169$]; 6:14,1.3[Ex-169$]; 6:16,1.2[Ex-168$]; 7:5,3.2[Ex-168$]; 7:7,2.2[Ex-169$]; 7:7,3.2[Ex-169$]; 7:10,1.3[Ex-169$]; 7:13,1.1[Ex-169$]; 7:17,2.1[Ex-168$]; 7:34,3.2[Ex-168$]; 7:37,1.3[Ex-169$]; 7:40,1.2[Ex-168$]; 8:1,1.2[Ex-168$]; 8:2,3.2[Ex-168$]; 8:3,1.2[Ex-168$]; 8:3,2.2[Ex-169$]; 8:7,2.2[Ex-168$]; 8:12,1.2[Ex-168$]; 9:2,1.2[Ex-168$]; 9:7,1.2[Ex-168$]; 9:8,1.2[Ex-168$]; 9:9,1.2[Ex-168$]; 9:13,1.2[Ex-169$]; 9:18,1.2[Ex-169$]; 9:21,3.2[Ex-168$]; 10:2,1.3; 10:3,1.2[Ex-168$]; 10:4,1.2[Ex-168$]; 10:4,2.2[Ex-168$]; 10:9,1.1[Ex-170$]; 10:9,2.2[Ex-168$]; 10:20,2.2[Ex-168$]; 10:28,2.2[Ex-168$]; 10:31,1.2[Ex-168$]; 11:9,1.2[Ex-168$]; 11:15,1.2[Ex-169$]; 11:19,3.2[Ex-168$]; 11:20,1.3[Ex-168$]; 11:22,2.2[Ex-168$]; 11:24,2.2[Ex-168$]; 11:24,3.2[Ex-168$]; 11:25,1.2[Ex-168$]; 11:26,1.2[Ex-168$]; 11:32,1.2[Ex-168$]; 12:3,2.2[Ex-169$]; 12:9,1.2[Ex-169$]; 12:9,3.3[Ex-169$]; 12:10,1.2[Ex-168$]; 12:11,1.2[Ex-168$]; 12:20,1.2[Ex-169$]; 12:24,2.2[Ex-168$]; 12:31,2.2[Ex-168$]; 13:4,1.3[Ex-169$]; 13:5,1.2[Ex-168$]; 13:5,2.2; 13:13,1.2[Ex-168$]; 14:6,1.2[Ex-168$]; 14:11,1.2[Ex-168$]; 14:16,1.2[Ex-168$]; 14:18,1.4[Ex-169$]; 14:18,3.3[Ex-168$]; 14:19,1.2[Ex-169$]; 14:21,1.2[Ex-168$]; 14:21,2.2[Ex-168$]; 14:25,2.2[Ex-168$]; 14:33,1.2[Ex-168$]; 15:10,1.2[Ex-168$]; 15:12,1.2[Ex-168$]; 15:31,2.2[Ex-169$]; 15:37,1.2[Ex-169$]; 15:45,2.2[Ex-168$]; 15:47,1.4[Ex-171$]; 15:51,3.3[Ex-170$]; 15:52,1.2[Ex-168$]; 15:54,1.2[Ex-168$]; 16:3,1.2[Ex-168$]; 16:6,1.2[Ex-168$]; 16:15,2.3[Ex-168$]; 16:19,2.2[Ex-168$]; Count = 105

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms P^46^c \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-164; (2) Ex-169$; (3) Ex-168$; (4) Ex-170$; (5) Ex-162; (6) Ex-163; (7) Ex-166#; (8) Ex-171$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

3.1; 5.1; 9.1; 15.1; 19.1; 22.1; 34.1; 40.1; 52.1; 92.1; 123.1; 126.1; 139.1; 150.1; 183.1; 184.1; 201.1; 208.1; 209.1; 243.1; 290.2; 291.2; 293.1; 296.1; 320.1; 326.1; 327.1; 342.1; 351.2; 371.1; 374.1; 378.1; 383.1; 398.1; 400.1; 402.1; 403.1; 421.1; 422.1; 437.1; 439.1; 444.1; 446.1; 453.1; 456.1; 464.1; 469.1; Total = 47

Variants different from Parent[1]: 1:8,1.3[Ex-169$]; 1:10,1.2[Ex-168$]; 1:11,1.2[Ex-169$]; 1:13,1.2[Ex-168$]; 1:13,2.2[Ex-168$]; 1:18,2.2[Ex-169$]; 1:22,1.2[Ex-168$]; 1:24,1.2[Ex-168$]; 2:4,1.5[Ex-170$]; 2:8,1.2[Ex-168$]; 2:8,2.2[Ex-168$]; 2:12,2.2[Ex-168$]; 3:3,2.2[Ex-169$]; 3:3,3.2[Ex-168$]; 3:5,1.2[Ex-168$]; 3:5,2.2[Ex-168$]; 3:10,1.2[Ex-168$]; 3:12,2.3[Ex-170$]; 3:13,2.2[Ex-168$]; 4:11,1.2[Ex-169$]; 4:15,1.2[Ex-168$]; 5:4,1.3[Ex-169$]; 5:4,2.2[Ex-168$]; 5:10,2.2[Ex-169$]; 5:12,2.2[Ex-168$]; 5:13,2.2[Ex-168$]; 6:7,1.2[Ex-169$]; 6:16,1.2[Ex-168$]; 7:5,3.2[Ex-168$]; 7:7,2.2[Ex-169$]; 7:7,3.2[Ex-169$]; 7:10,1.3[Ex-169$]; 7:13,1.1[Ex-169$]; 7:34,3.2[Ex-168$]; 7:37,1.3[Ex-169$]; 7:40,1.2[Ex-168$]; 8:1,1.2[Ex-168$]; 8:2,3.2[Ex-168$]; 8:3,1.2[Ex-168$]; 8:3,2.2[Ex-169$]; 8:7,2.2[Ex-168$]; 8:12,1.2[Ex-168$]; 9:2,1.2[Ex-168$]; 9:7,1.2[Ex-168$]; 9:8,1.2[Ex-168$]; 9:9,1.2[Ex-168$]; 9:13,1.2[Ex-169$]; 9:18,1.2[Ex-169$]; 9:21,3.2[Ex-168$]; 10:3,1.2[Ex-168$]; 10:4,1.2[Ex-168$]; 10:4,2.2[Ex-168$]; 10:9,1.1[Ex-170$]; 10:9,2.2[Ex-168$]; 10:20,2.2[Ex-168$]; 10:28,2.2[Ex-168$]; 10:31,1.2[Ex-168$]; 11:9,1.2[Ex-168$]; 11:15,1.2[Ex-169$]; 11:19,3.2[Ex-168$]; 11:20,1.3[Ex-168$]; 11:22,2.2[Ex-168$]; 11:24,2.2[Ex-168$]; 11:24,3.2[Ex-168$]; 11:25,1.2[Ex-168$]; 11:26,1.2[Ex-168$]; 11:32,1.2[Ex-168$]; 12:3,2.2[Ex-169$]; 12:9,1.2[Ex-169$]; 12:9,3.3[Ex-169$]; 12:10,1.2[Ex-168$]; 12:11,1.2[Ex-168$]; 12:24,2.2[Ex-168$]; 12:31,2.2[Ex-168$]; 13:4,1.3[Ex-169$]; 13:5,1.2[Ex-168$]; 13:13,1.2[Ex-168$]; 14:6,1.2[Ex-168$]; 14:11,1.2[Ex-168$]; 14:16,1.2[Ex-168$]; 14:18,1.4[Ex-169$]; 14:18,3.3[Ex-168$]; 14:19,1.2[Ex-169$]; 14:21,1.2[Ex-168$]; 14:21,2.2[Ex-168$]; 14:25,2.2[Ex-168$]; 14:33,1.2[Ex-168$]; 15:10,1.2[Ex-168$]; 15:12,1.2[Ex-168$]; 15:31,2.2[Ex-169$]; 15:37,1.2[Ex-169$]; 15:45,2.2[Ex-168$]; 15:47,1.4[Ex-171$]; 15:51,3.3[Ex-170$]; 15:52,1.2[Ex-168$]; 15:54,1.2[Ex-168$]; 16:3,1.2[Ex-168$]; 16:6,1.2[Ex-168$]; 16:15,2.3[Ex-168$]; 16:19,2.2[Ex-168$]; Count = 100

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms P^46^1 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-164; (2) Ex-169$; (3) Ex-168$; (4) Ex-170$; (5) Ex-162; (6) Ex-163; (7) Ex-166#; (8) Ex-171$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

3.1; 5.1; 9.1; 15.1; 19.1; 22.1; 34.1; 40.1; 52.1; 92.1; 123.1; 126.1; 139.1; 150.1; 183.1; 184.1; 201.1; 208.1; 209.1; 243.1; 290.2; 291.2; 293.1; 296.1; 320.1; 326.1; 327.1; 342.1; 351.2; 371.1; 374.1; 378.1; 383.1; 398.1; 400.1; 402.1; 403.1; 421.1; 422.1; 437.1; 439.1; 444.1; 446.1; 453.1; 456.1; 464.1; 469.1; Total = 47

Variants different from Parent[1]: 1:8,1.3[Ex-169$]; 1:10,1.2[Ex-168$]; 1:11,1.2[Ex-169$]; 1:13,1.2[Ex-168$]; 1:13,2.2[Ex-168$]; 1:18,2.2[Ex-169$]; 1:22,1.2[Ex-168$]; 1:24,1.2[Ex-168$]; 2:4,1.5[Ex-170$]; 2:8,1.2[Ex-168$]; 2:8,2.2[Ex-168$]; 2:12,2.2[Ex-168$]; 3:3,2.2[Ex-169$]; 3:3,3.2[Ex-168$]; 3:5,1.2[Ex-168$]; 3:5,2.2[Ex-168$]; 3:10,1.2[Ex-168$]; 3:12,2.3[Ex-170$]; 3:13,2.2[Ex-168$]; 4:11,1.2[Ex-169$]; 4:15,1.2[Ex-168$]; 5:4,1.3[Ex-169$]; 5:4,2.2[Ex-168$]; 5:10,2.2[Ex-169$]; 5:12,2.2[Ex-168$]; 5:13,2.2[Ex-168$]; 6:7,1.2[Ex-169$]; 6:14,1.1[Ex-168$]; 6:16,1.2[Ex-168$]; 7:5,3.2[Ex-168$]; 7:7,2.2[Ex-169$]; 7:7,3.2[Ex-169$]; 7:10,1.3[Ex-169$]; 7:13,1.1[Ex-169$]; 7:34,3.2[Ex-168$]; 7:37,1.3[Ex-169$]; 7:40,1.2[Ex-168$]; 8:1,1.2[Ex-168$]; 8:2,3.2[Ex-168$]; 8:3,1.2[Ex-168$]; 8:3,2.2[Ex-169$]; 8:7,2.2[Ex-168$]; 8:12,1.2[Ex-168$]; 9:2,1.2[Ex-168$]; 9:7,1.2[Ex-168$]; 9:8,1.2[Ex-168$]; 9:9,1.2[Ex-168$]; 9:13,1.2[Ex-169$]; 9:18,1.2[Ex-169$]; 9:21,3.2[Ex-168$]; 10:3,1.2[Ex-168$]; 10:4,1.2[Ex-168$]; 10:4,2.2[Ex-168$]; 10:9,1.1[Ex-170$]; 10:9,2.2[Ex-168$]; 10:20,2.2[Ex-168$]; 10:28,2.2[Ex-168$]; 10:31,1.2[Ex-168$]; 11:9,1.2[Ex-168$]; 11:15,1.2[Ex-169$]; 11:19,3.2[Ex-168$]; 11:20,1.3[Ex-168$]; 11:22,2.2[Ex-168$]; 11:24,2.2[Ex-168$]; 11:24,3.2[Ex-168$]; 11:25,1.2[Ex-168$]; 11:26,1.2[Ex-168$]; 11:32,1.2[Ex-168$]; 12:3,2.2[Ex-169$]; 12:9,1.2[Ex-169$]; 12:9,3.3[Ex-169$]; 12:10,1.2[Ex-168$]; 12:11,1.2[Ex-168$]; 12:24,2.2[Ex-168$]; 12:31,2.2[Ex-168$]; 13:4,1.3[Ex-169$]; 13:5,1.2[Ex-168$]; 13:5,2.1[Ex-168$]; 13:13,1.2[Ex-168$]; 14:6,1.2[Ex-168$]; 14:11,1.2[Ex-168$]; 14:16,1.2[Ex-168$]; 14:18,1.4[Ex-169$]; 14:18,3.3[Ex-168$]; 14:19,1.2[Ex-169$]; 14:21,1.2[Ex-168$]; 14:21,2.2[Ex-168$]; 14:25,2.2[Ex-168$]; 14:33,1.2[Ex-168$]; 15:10,1.2[Ex-168$]; 15:12,1.2[Ex-168$]; 15:31,2.2[Ex-169$]; 15:37,1.2[Ex-169$]; 15:45,2.2[Ex-168$]; 15:47,1.4[Ex-171$]; 15:51,3.3[Ex-170$]; 15:52,1.2[Ex-168$]; 15:54,1.2[Ex-168$]; 16:3,1.2[Ex-168$]; 16:6,1.2[Ex-168$]; 16:15,2.3[Ex-168$]; 16:19,2.2[Ex-168$]; Count = 102

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms P^46^2 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-164; (2) Ex-169$; (3) Ex-168$; (4) Ex-170$; (5) Ex-162; (6) Ex-163; (7) Ex-166#; (8) Ex-171$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

3.1; 5.1; 9.1; 15.1; 19.1; 22.1; 34.1; 40.1; 52.1; 92.1; 123.1; 126.1; 139.1; 150.1; 183.1; 184.1; 201.1; 208.1; 209.1; 243.1; 290.2; 291.2; 293.1; 296.1; 320.1; 326.1; 327.1; 342.1; 351.2; 371.1; 374.1; 378.1; 383.1; 398.1; 400.1; 402.1; 403.1; 421.1; 422.1; 437.1; 439.1; 444.1; 446.1; 453.1; 456.1; 464.1; 469.1; Total = 47

Variants different from Parent[1]: 1:8,1.3[Ex-169$]; 1:10,1.2[Ex-168$]; 1:11,1.2[Ex-169$]; 1:13,1.2[Ex-168$]; 1:13,2.2[Ex-168$]; 1:18,2.2[Ex-169$]; 1:22,1.2[Ex-168$]; 1:24,1.2[Ex-168$]; 2:4,1.5[Ex-170$]; 2:8,1.2[Ex-168$]; 2:8,2.2[Ex-168$]; 2:12,2.2[Ex-168$]; 3:3,2.2[Ex-169$]; 3:3,3.2[Ex-168$]; 3:5,1.2[Ex-168$]; 3:5,2.2[Ex-168$]; 3:10,1.2[Ex-168$]; 3:12,2.3[Ex-170$]; 3:13,2.2[Ex-168$]; 4:11,1.2[Ex-169$]; 4:15,1.2[Ex-168$]; 5:4,1.3[Ex-169$]; 5:4,2.2[Ex-168$]; 5:10,2.2[Ex-169$]; 5:12,2.2[Ex-168$]; 5:13,2.2[Ex-168$]; 6:7,1.2[Ex-169$]; 6:16,1.2[Ex-168$]; 7:5,3.2[Ex-168$]; 7:7,2.2[Ex-169$]; 7:7,3.2[Ex-169$]; 7:10,1.3[Ex-169$]; 7:13,1.1[Ex-169$]; 7:34,3.2[Ex-168$]; 7:37,1.3[Ex-169$]; 7:40,1.2[Ex-168$]; 8:1,1.2[Ex-168$]; 8:2,3.2[Ex-168$]; 8:3,1.2[Ex-168$]; 8:3,2.2[Ex-169$]; 8:7,2.2[Ex-168$]; 8:12,1.2[Ex-168$]; 9:2,1.2[Ex-168$]; 9:7,1.2[Ex-168$]; 9:8,1.2[Ex-168$]; 9:9,1.2[Ex-168$]; 9:13,1.2[Ex-169$]; 9:18,1.2[Ex-169$]; 9:21,3.2[Ex-168$]; 10:3,1.2[Ex-168$]; 10:4,1.2[Ex-168$]; 10:4,2.2[Ex-168$]; 10:9,1.1[Ex-170$]; 10:9,2.2[Ex-168$]; 10:20,2.2[Ex-168$]; 10:28,2.2[Ex-168$]; 10:31,1.2[Ex-168$]; 11:9,1.2[Ex-168$]; 11:15,1.2[Ex-169$]; 11:19,3.2[Ex-168$]; 11:20,1.3[Ex-168$]; 11:22,2.2[Ex-168$]; 11:24,2.2[Ex-168$]; 11:24,3.2[Ex-168$]; 11:25,1.2[Ex-168$]; 11:26,1.2[Ex-168$]; 11:32,1.2[Ex-168$]; 12:3,2.2[Ex-169$]; 12:9,1.2[Ex-169$]; 12:9,3.3[Ex-169$]; 12:10,1.2[Ex-168$]; 12:11,1.2[Ex-168$]; 12:24,2.2[Ex-168$]; 12:31,2.2[Ex-168$]; 13:4,1.3[Ex-169$]; 13:5,1.2[Ex-168$]; 13:5,2.1[Ex-168$]; 13:13,1.2[Ex-168$]; 14:6,1.2[Ex-168$]; 14:11,1.2[Ex-168$]; 14:16,1.2[Ex-168$]; 14:18,1.4[Ex-169$]; 14:18,3.3[Ex-168$]; 14:19,1.2[Ex-169$]; 14:21,1.2[Ex-168$]; 14:21,2.2[Ex-168$]; 14:25,2.2[Ex-168$]; 14:33,1.2[Ex-168$]; 15:10,1.2[Ex-168$]; 15:12,1.2[Ex-168$]; 15:31,2.2[Ex-169$]; 15:37,1.2[Ex-169$]; 15:45,2.2[Ex-168$]; 15:47,1.4[Ex-171$]; 15:51,3.3[Ex-170$]; 15:52,1.2[Ex-168$]; 15:54,1.2[Ex-168$]; 16:3,1.2[Ex-168$]; 16:6,1.2[Ex-168$]; 16:15,2.3[Ex-168$]; 16:19,2.2[Ex-168$]; Count = 101

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms P^61% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-163; (2) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

33.0; 94.1; 133.0; 210.0; 344.0; Total = 5

Variants different from Parent[1]: 1:1,1.2[Ex-168$]; 5:10,2.1[Ex-168$]; Count = 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms P^68% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-147;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

16.0; 17.0; 30.0; 34.0; 40.0; 45.0; 49.0; 51.0; 58.0; 59.0; 61.0; 63.0; 65.0; 67.0; 68.0; 69.0; 84.0; 90.0; 94.0; 96.0; 100.0; 105.0; 108.0; 115.0; 118.0; 121.0; 126.0; 131.0; 147.0; 151.0; 153.0; 156.0; 157.0; 158.0; 160.0; 180.0; 203.0; 205.0; 207.0; 208.0; 211.0; 216.0; 218.0; 219.0; 222.0; 223.0; 225.0; 229.0; 231.0; 233.0; 234.0; 239.0; 246.0; 264.0; 266.0; 269.0; 290.0; 291.0; 309.0; 311.0; 320.0; 321.0; 322.0; 334.0; 342.0; 343.0; 347.0; 352.0; 356.0; 359.0; 376.0; 382.0; 384.0; 386.0; 394.0; 400.0; 412.0; 419.0; 422.0; 424.0; 426.0; 429.0; 435.0; 439.0; 440.0; 441.0; 445.0; 461.0; Total = 88

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 01\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-154; (2) Ex-168$; (3) Ex-170$; (4) Ex-169$; (5) Ex-166#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

65.2; 107.2; 120.2; 199.2; 206.2; 251.2; 253.2; 262.2; 328.2; 341.2; 363.2; 386.2; 412.2; Total = 13

Variants different from Parent[1]: 1:4,1.2[Ex-168$]; 3:13,2.2[Ex-168$]; 5:4,1.4[Ex-170$]; 5:5,1.2[Ex-169$]; 6:7,2.2[Ex-168$]; 6:20,1.3[Ex-169$]; 7:13,1.1[Ex-169$]; 9:12,1.2[Ex-169$]; 9:16,1.2[Ex-168$]; 10:3,1.3; 10:8,1.1[Ex-166#]; 10:10,2.1[Ex-168$]; 10:11,1.2[Ex-168$]; 11:17,1.1[Ex-168$]; 11:17,2.1[Ex-168$]; 11:27,2.2[Ex-168$]; 12:9,3.2[Ex-168$]; 14:37,1.2[Ex-169$]; 15:28,3.1[Ex-168$]; 15:50,2.1[Ex-168$]; 15:54,1.2[Ex-168$]; 16:4,1.2[Ex-168$]; 16:12,1.2[Ex-168$]; Count = 23

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 01^c% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-155#; (2) Ex-169$; (3) Ex-168$; (4) Ex-170$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

2.2; 4.2; 25.2; 33.2; 35.2; 49.2; 56.1; 58.2; 59.2; 63.2; 78.2; 79.2; 82.2; 90.2; 96.2; 99.2; 100.2; 104.2; 140.2; 143.2; 144.2; 145.2; 151.2; 153.2; 169.1; 177.2; 180.2; 182.2; 185.2; 186.2; 200.2; 223.2; 224.2; 226.2; 231.2; 237.2; 238.2; 239.2; 248.2; 260.2; 271.2; 272.2; 290.1; 291.1; 304.2; 306.2; 311.2; 313.2; 321.1; 322.2; 324.2; 329.2; 332.2; 340.2; 341.2; 347.2; 356.2; 359.2; 366.2; 370.2; 400.2; 409.2; 433.1; 445.1; 447.2; 448.2; Total = 66

Variants different from Parent[1]: 1:29,1.1[Ex-168$]; 3:12,2.2[Ex-169$]; 4:14,1.1[Ex-168$]; 5:4,1.4[Ex-170$]; 5:11,2.2[Ex-169$]; 6:2,2.2[Ex-169$]; 6:7,2.2[Ex-168$]; 10:9,1.2[Ex-168$]; 10:9,2.2[Ex-168$]; 10:10,1.2[Ex-169$]; 10:11,1.2[Ex-168$]; 11:27,2.2[Ex-168$]; 12:10,4.2[Ex-168$]; 13:8,3.2[Ex-169$]; 14:15,1.2[Ex-168$]; 14:39,1.1[Ex-168$]; 14:39,3.1[Ex-169$]; 15:5,1.2[Ex-168$]; 15:50,2.1[Ex-168$]; 15:51,3.2[Ex-169$]; Count = 20

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 01^1% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-154; (2) Ex-168$; (3) Ex-170$; (4) Ex-155#; (5) Ex-158; (6) Ex-164;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

65.2; 107.2; 120.2; 199.2; 206.2; 251.2; 253.2; 262.2; 328.2; 341.2; 363.2; 386.2; 412.2; Total = 13

Variants different from Parent[1]: 2:15,1.2[Ex-168$]; 3:13,2.2[Ex-168$]; 5:4,1.4[Ex-170$]; 5:5,1.2[Ex-155#]; 5:11,1.1[Ex-168$]; 6:7,2.2[Ex-168$]; 6:15,2.1[Ex-168$]; 7:13,1.1[Ex-155#]; 8:3,2.1[Ex-168$]; 8:8,1.1[Ex-168$]; 9:12,1.2[Ex-155#]; 10:10,2.1[Ex-168$]; 10:11,1.2[Ex-168$]; 10:19,2.1[Ex-168$]; 11:17,1.1[Ex-168$]; 11:17,2.1[Ex-168$]; 11:27,2.2[Ex-168$]; 12:9,3.2[Ex-168$]; 15:28,3.1[Ex-168$]; 15:50,2.1[Ex-168$]; Count = 20

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 01^2 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-155#; (2) Ex-169$; (3) Ex-168$; (4) Ex-170$; (5) Ex-165#; (6) Ex-166#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

2.2; 4.2; 25.2; 33.2; 35.2; 49.2; 56.1; 58.2; 59.2; 63.2; 78.2; 79.2; 82.2; 90.2; 96.2; 99.2; 100.2; 104.2; 140.2; 143.2; 144.2; 145.2; 151.2; 153.2; 169.1; 177.2; 180.2; 182.2; 185.2; 186.2; 200.2; 223.2; 224.2; 226.2; 231.2; 237.2; 238.2; 239.2; 248.2; 260.2; 271.2; 272.2; 290.1; 291.1; 304.2; 306.2; 311.2; 313.2; 321.1; 322.2; 324.2; 329.2; 332.2; 340.2; 341.2; 347.2; 356.2; 359.2; 366.2; 370.2; 400.2; 409.2; 433.1; 445.1; 447.2; 448.2; Total = 66

Variants different from Parent[1]: 3:12,2.2[Ex-169$]; 4:14,1.1[Ex-168$]; 5:4,1.4[Ex-170$]; 5:11,2.2[Ex-169$]; 6:2,2.2[Ex-169$]; 6:7,2.2[Ex-168$]; 8:11,2.2[Ex-168$]; 10:9,1.2[Ex-168$]; 10:9,2.2[Ex-168$]; 10:10,1.2[Ex-169$]; 10:11,1.2[Ex-168$]; 11:27,2.2[Ex-168$]; 12:10,4.2[Ex-168$]; 13:8,3.2[Ex-169$]; 14:15,1.2[Ex-168$]; 14:39,1.1[Ex-168$]; 14:39,3.1[Ex-169$]; 15:5,1.2[Ex-168$]; 15:50,2.1[Ex-168$]; 15:51,3.2[Ex-169$]; 16:15,1.2[Ex-166#]; Count = 21

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms A\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-157; (2) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

1.2; 16.1; 35.2; 39.2; 42.2; 71.2; 89.2; 94.2; 96.1; 113.2; 125.2; 126.1; 135.2; 147.2; 156.2; 174.2; 188.2; 210.2; 225.2; 227.2; 244.2; 245.2; 246.2; 250.1; 256.2; 275.2; 305.2; 312.2; 322.2; 329.2; 330.2; 334.1; 335.2; 338.2; 347.2; 359.2; 369.2; 373.2; 379.1; 396.2; 399.1; 420.2; 426.2; 429.2; 433.1; 438.2; 442.2; 443.1; 448.2; 461.2; 462.2; 468.2; Total = 52

Variants different from Parent[1]: 8:8,3.3; 14:34,6.1[Ex-168$]; Count = 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms A^c \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-157; (2) Ex-168$; (3) Ex-170$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

1.2; 16.1; 35.2; 39.2; 42.2; 71.2; 89.2; 94.2; 96.2; 113.2; 125.2; 126.1; 135.2; 147.2; 156.2; 174.2; 188.2; 210.2; 225.2; 227.2; 244.2; 245.2; 246.2; 250.1; 256.2; 275.2; 305.2; 312.2; 322.2; 329.2; 330.2; 334.1; 335.2; 338.2; 347.2; 359.2; 369.2; 373.2; 379.2; 396.2; 399.1; 420.2; 426.2; 429.2; 433.1; 438.2; 442.2; 443.1; 448.2; 461.2; 462.2; 468.2; Total = 52

Variants different from Parent[1]: 1:2,2.2[Ex-168$]; 6:19,1.2[Ex-168$]; 14:38,1.2[Ex-168$]; 15:6,1.2[Ex-168$]; 15:51,3.3[Ex-170$]; 15:54,3.3[Ex-170$]; Count = 6

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms B\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-144;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

6.1; 222.1; 284.1; 401.1; Total = 4

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms B^c \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-158;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

20.1; 30.1; 33.1; 39.1; 47.1; 49.1; 50.1; 65.1; 69.1; 75.1; 82.1; 86.1; 89.1; 101.1; 108.1; 115.1; 116.1; 125.2; 132.1; 142.1; 143.1; 166.1; 173.1; 175.1; 190.1; 202.1; 219.1; 229.1; 259.1; 266.1; 268.1; 285.1; 299.1; 321.1; 335.1; 336.1; 337.1; 349.1; 353.1; 364.1; 365.1; 376.1; 388.1; 410.1; 412.1; 415.1; 417.1; 431.1; 435.1; 452.1; 460.1; Total = 51

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms B^1 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-144;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

6.1; 222.1; 284.1; 401.1; Total = 4

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms B^2 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-158; (2) Ex-168$; (3) Ex-169$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

20.1; 30.1; 33.1; 39.1; 47.1; 49.1; 50.1; 65.1; 69.1; 75.1; 82.1; 86.1; 89.1; 101.1; 108.1; 115.1; 116.1; 125.2; 132.1; 142.1; 143.1; 166.1; 173.1; 175.1; 190.1; 202.1; 219.1; 229.1; 259.1; 266.1; 268.1; 285.1; 299.1; 321.1; 335.1; 336.1; 337.1; 349.1; 353.1; 364.1; 365.1; 376.1; 388.1; 410.1; 412.1; 415.1; 417.1; 431.1; 435.1; 452.1; 460.1; Total = 51

Variants different from Parent[1]: 3:14,1.2[Ex-168$]; 5:10,3.2[Ex-169$]; 5:11,2.2[Ex-169$]; 6:2,2.2[Ex-169$]; 12:2,3.2[Ex-169$]; 16:8,1.2[Ex-169$]; 16:22,1.2[Ex-168$]; Count = 7

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms C\*% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-154; (2) Ex-160; (3) Ex-168$; (4) Ex-169$; (5) Ex-155#; (6) Ex-157; (7) Ex-170$; (8) Ex-166#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

65.0; 107.0; 120.0; 199.0; 206.0; 251.0; 253.0; 262.0; 328.0; 341.0; 363.0; 386.0; 412.0; Total = 13

Variants different from Parent[1]: 1:11,1.2[Ex-160]; 1:14,1.1[Ex-160]; 1:29,1.2[Ex-169$]; 2:2,1.1[Ex-168$]; 2:4,1.2[Ex-169$]; 2:9,1.2[Ex-168$]; 3:5,1.2[Ex-168$]; 3:5,2.2[Ex-168$]; 4:6,2.2[Ex-155#]; 4:17,1.1[Ex-160]; 5:7,1.2[Ex-168$]; 6:7,1.1[Ex-168$]; 6:11,1.3[Ex-160]; 6:15,2.1[Ex-160]; 7:13,1.1[Ex-160]; 7:17,2.1[Ex-168$]; 9:13,1.2[Ex-160]; 9:15,1.4[Ex-160]; 9:16,2.1[Ex-166#]; 9:22,1.2[Ex-155#]; 10:3,1.2[Ex-168$]; 10:4,2.2[Ex-168$]; 10:9,3.2[Ex-168$]; 10:10,1.1[Ex-160]; 10:11,1.3[Ex-160]; 10:28,1.2[Ex-160]; 11:15,1.3[Ex-170$]; 11:19,3.2[Ex-168$]; 11:25,1.2[Ex-168$]; 11:31,1.2[Ex-155#]; 12:6,1.2[Ex-168$]; 12:9,1.2[Ex-169$]; 12:10,5.2[Ex-169$]; 12:21,1.2[Ex-160]; 12:25,1.1[Ex-160]; 12:26,2.1[Ex-160]; 13:2,1.2[Ex-169$]; 13:3,1.2[Ex-160]; 15:51,2.1[Ex-168$]; 15:54,1.2[Ex-160]; 16:2,2.2[Ex-168$]; 16:15,1.3[Ex-169$]; 16:17,1.1[Ex-168$]; 16:19,4.2[Ex-160]; 16:23,1.2[Ex-160]; Count = 45

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms C^1% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-154; (2) Ex-168$; (3) Ex-164; (4) Ex-155#; (5) Ex-157; (6) Ex-158; (7) Ex-170$; (8) Ex-169$; (9) Ex-166#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

65.0; 107.0; 120.0; 199.0; 206.0; 251.0; 253.0; 262.0; 328.0; 341.0; 363.0; 386.0; 412.0; Total = 13

Variants different from Parent[1]: 1:14,1.1[Ex-168$]; 2:2,1.1[Ex-168$]; 2:4,1.2[Ex-155#]; 2:9,1.2[Ex-168$]; 3:5,1.2[Ex-168$]; 3:5,2.2[Ex-168$]; 4:6,2.2[Ex-155#]; 4:17,1.1[Ex-168$]; 5:7,1.2[Ex-168$]; 6:7,1.1[Ex-168$]; 6:11,1.3[Ex-158]; 6:15,2.1[Ex-168$]; 7:13,1.1[Ex-155#]; 7:17,2.1[Ex-168$]; 9:13,1.2[Ex-157]; 9:15,1.4[Ex-155#]; 9:16,2.1[Ex-158]; 9:22,1.2[Ex-155#]; 10:4,2.2[Ex-168$]; 10:9,3.2[Ex-168$]; 10:10,1.1[Ex-168$]; 10:11,1.3[Ex-155#]; 10:19,2.1[Ex-168$]; 10:28,1.2[Ex-166#]; 11:15,1.3[Ex-170$]; 11:19,3.2[Ex-168$]; 11:25,1.2[Ex-168$]; 11:31,1.2[Ex-155#]; 12:6,1.2[Ex-168$]; 12:9,1.2[Ex-155#]; 12:10,5.2[Ex-155#]; 12:21,1.2[Ex-157]; 12:25,1.1[Ex-168$]; 12:26,2.1[Ex-168$]; 13:2,1.2[Ex-155#]; 13:3,1.2[Ex-166#]; 16:2,2.2[Ex-168$]; 16:17,1.1[Ex-168$]; 16:19,4.2[Ex-166#]; 16:23,1.2[Ex-168$]; Count = 40

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms C^2% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-154; (2) Ex-168$; (3) Ex-164; (4) Ex-155#; (5) Ex-157; (6) Ex-158; (7) Ex-170$; (8) Ex-169$; (9) Ex-166#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

65.0; 107.0; 120.0; 199.0; 206.0; 251.0; 253.0; 262.0; 328.0; 341.0; 363.0; 386.0; 412.0; Total = 13

Variants different from Parent[1]: 1:14,1.1[Ex-168$]; 2:2,1.1[Ex-168$]; 2:4,1.2[Ex-155#]; 2:9,1.2[Ex-168$]; 3:5,1.2[Ex-168$]; 3:5,2.2[Ex-168$]; 4:6,2.2[Ex-155#]; 4:17,1.1[Ex-168$]; 5:7,1.2[Ex-168$]; 6:7,1.1[Ex-168$]; 6:11,1.3[Ex-158]; 6:15,2.1[Ex-168$]; 7:9,1.1[Ex-168$]; 7:13,1.1[Ex-155#]; 7:17,2.1[Ex-168$]; 9:7,2.2[Ex-158]; 9:13,1.2[Ex-157]; 9:15,1.4[Ex-155#]; 9:16,2.1[Ex-158]; 9:22,1.2[Ex-155#]; 10:4,2.2[Ex-168$]; 10:9,3.2[Ex-168$]; 10:10,1.1[Ex-168$]; 10:11,1.3[Ex-155#]; 10:19,2.1[Ex-168$]; 10:28,1.2[Ex-166#]; 11:15,1.3[Ex-170$]; 11:19,3.2[Ex-168$]; 11:25,1.2[Ex-168$]; 11:31,1.2[Ex-155#]; 12:6,1.2[Ex-168$]; 12:9,1.2[Ex-155#]; 12:10,5.2[Ex-155#]; 12:21,1.2[Ex-157]; 12:25,1.1[Ex-168$]; 12:26,2.1[Ex-168$]; 13:2,1.2[Ex-155#]; 13:3,1.2[Ex-166#]; 16:2,2.2[Ex-168$]; 16:17,1.1[Ex-168$]; 16:19,4.2[Ex-166#]; 16:23,1.2[Ex-168$]; Count = 42

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms C^3% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-154; (2) Ex-168$; (3) Ex-155#; (4) Ex-158; (5) Ex-164; (6) Ex-157; (7) Ex-169$; (8) Ex-152; (9) Ex-170$; (10) Ex-166#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

65.0; 107.0; 120.0; 199.0; 206.0; 251.0; 253.0; 262.0; 328.0; 341.0; 363.0; 386.0; 412.0; Total = 13

Variants different from Parent[1]: 1:14,1.1[Ex-168$]; 1:15,1.2[Ex-168$]; 1:20,1.2[Ex-168$]; 1:23,1.2[Ex-168$]; 1:28,1.2[Ex-155#]; 2:2,1.1[Ex-168$]; 2:4,1.2[Ex-155#]; 2:9,1.2[Ex-168$]; 3:1,1.2[Ex-168$]; 3:5,1.2[Ex-168$]; 3:5,2.2[Ex-168$]; 3:10,2.2[Ex-155#]; 3:12,1.2[Ex-168$]; 4:6,2.2[Ex-155#]; 4:17,1.1[Ex-168$]; 5:7,1.2[Ex-168$]; 5:7,2.2[Ex-155#]; 6:7,1.1[Ex-168$]; 6:11,1.3[Ex-158]; 6:15,2.1[Ex-168$]; 6:20,2.2[Ex-169$]; 7:13,1.1[Ex-155#]; 7:17,2.1[Ex-168$]; 9:7,1.2[Ex-168$]; 9:13,1.2[Ex-157]; 9:15,1.4[Ex-155#]; 9:16,2.1[Ex-158]; 9:22,1.2[Ex-155#]; 10:4,2.2[Ex-168$]; 10:9,3.2[Ex-168$]; 10:10,1.1[Ex-168$]; 10:11,1.3[Ex-155#]; 10:19,2.1[Ex-168$]; 10:23,1.2[Ex-155#]; 10:23,2.2[Ex-155#]; 10:28,1.2[Ex-152]; 10:28,3.2[Ex-169$]; 11:15,1.3[Ex-170$]; 11:19,3.2[Ex-168$]; 11:24,1.2[Ex-169$]; 11:24,4.2[Ex-155#]; 11:25,1.2[Ex-168$]; 11:26,1.2[Ex-168$]; 11:29,1.2[Ex-168$]; 11:29,2.2[Ex-168$]; 11:31,1.2[Ex-155#]; 12:6,1.2[Ex-168$]; 12:9,1.2[Ex-155#]; 12:9,3.2[Ex-168$]; 12:10,5.2[Ex-155#]; 12:21,1.2[Ex-157]; 12:25,1.1[Ex-168$]; 12:26,2.1[Ex-168$]; 13:2,1.2[Ex-155#]; 13:3,1.2[Ex-166#]; 16:2,2.2[Ex-168$]; 16:17,1.1[Ex-168$]; 16:19,4.2[Ex-152]; 16:23,1.2[Ex-168$]; Count = 59

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms D06\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-156; (2) Ex-157; (3) Ex-168$; (4) Ex-155#; (5) Ex-170$; (6) Ex-165#; (7) Ex-169$; (8) Ex-158; (9) Ex-154; (10) Ex-164;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

43.1; 66.1; 213.1; 214.1; 217.1; 315.1; 337.1; 380.1; 390.1; 392.1; 393.1; 399.2; 404.1; 405.1; 416.1; Total = 15

Variants different from Parent[1]: 1:1,1.2[Ex-157]; 1:2,1.2[Ex-168$]; 1:8,1.2[Ex-168$]; 1:8,2.2[Ex-168$]; 1:9,1.2[Ex-168$]; 1:11,1.1[Ex-157]; 1:13,3.2[Ex-168$]; 1:16,1.1[Ex-157]; 1:18,2.1[Ex-157]; 1:18,3.1[Ex-157]; 1:26,1.2[Ex-168$]; 2:1,1.2[Ex-168$]; 2:4,2.2[Ex-168$]; 2:11,2.1[Ex-157]; 2:12,1.2[Ex-168$]; 2:12,2.2[Ex-168$]; 3:3,1.2[Ex-168$]; 3:3,3.2[Ex-168$]; 3:5,1.2[Ex-168$]; 3:5,2.2[Ex-168$]; 3:17,1.2[Ex-168$]; 3:17,2.2[Ex-157]; 3:18,1.2[Ex-168$]; 4:2,2.2[Ex-157]; 4:5,1.2[Ex-168$]; 4:17,2.3[Ex-170$]; 5:3,1.1[Ex-157]; 5:6,2.2; 5:10,2.1[Ex-157]; 5:11,1.2[Ex-169$]; 5:11,2.2[Ex-157]; 5:12,1.2[Ex-169$]; 6:2,2.2[Ex-157]; 6:5,2.2[Ex-168$]; 6:11,1.1[Ex-168$]; 6:14,1.3[Ex-157]; 6:16,1.2[Ex-168$]; 7:2,1.1[Ex-157]; 7:5,3.1[Ex-157]; 7:14,2.1[Ex-157]; 7:22,1.3[Ex-169$]; 7:28,1.2[Ex-168$]; 7:29,1.2[Ex-168$]; 7:29,2.2[Ex-168$]; 7:31,2.1[Ex-157]; 7:32,1.1[Ex-157]; 7:34,1.4[Ex-168$]; 7:34,3.2[Ex-157]; 7:35,1.1[Ex-157]; 7:36,1.2[Ex-168$]; 7:37,1.1[Ex-157]; 7:40,4.1[Ex-157]; 8:2,2.1[Ex-157]; 8:10,1.1[Ex-157]; 9:5,1.1[Ex-157]; 9:7,1.1[Ex-157]; 9:9,1.3[Ex-169$]; 9:12,1.2[Ex-155#]; 9:13,1.1[Ex-168$]; 9:15,1.1[Ex-165#]; 9:16,1.2[Ex-168$]; 9:16,2.1[Ex-158]; 9:18,1.3[Ex-170$]; 9:22,1.2[Ex-155#]; 10:10,1.2[Ex-169$]; 10:11,1.2[Ex-168$]; 10:11,2.2[Ex-157]; 10:13,1.1[Ex-157]; 10:13,2.2[Ex-168$]; 10:19,1.1[Ex-157]; 10:19,3.1[Ex-157]; 10:20,1.1[Ex-168$]; 10:20,3.2[Ex-168$]; 10:29,1.1[Ex-157]; 11:2,2.1[Ex-157]; 11:17,1.4[Ex-169$]; 11:17,2.4[Ex-169$]; 11:19,2.1[Ex-168$]; 11:20,1.3[Ex-168$]; 11:22,1.1[Ex-157]; 11:23,3.2[Ex-168$]; 11:24,2.1[Ex-157]; 12:2,1.1[Ex-157]; 12:2,2.1[Ex-157]; 12:2,3.1[Ex-157]; 12:3,1.2[Ex-168$]; 12:3,2.2[Ex-169$]; 12:9,2.1[Ex-157]; 12:9,3.2[Ex-168$]; 12:10,1.2[Ex-168$]; 12:10,6.2[Ex-157]; 12:12,1.2[Ex-155#]; 12:21,1.1[Ex-168$]; 12:24,1.2[Ex-168$]; 12:25,1.2[Ex-155#]; 12:26,1.1[Ex-157]; 12:27,1.2[Ex-168$]; 12:31,2.2[Ex-168$]; 13:4,1.1[Ex-157]; 13:12,1.2[Ex-168$]; 14:5,1.4; 14:6,1.2[Ex-168$]; 14:7,1.1[Ex-157]; 14:28,1.2[Ex-168$]; 14:39,3.3[Ex-168$]; 15:10,1.3[Ex-169$]; 15:12,1.2[Ex-168$]; 15:14,1.1[Ex-157]; 15:14,2.2[Ex-169$]; 15:24,1.1[Ex-157]; 15:27,1.1[Ex-157]; 15:28,1.2[Ex-168$]; 15:31,2.2[Ex-169$]; 15:31,3.2[Ex-168$]; 15:37,1.1[Ex-157]; 15:47,2.1[Ex-157]; 15:50,1.2[Ex-168$]; 15:51,2.1[Ex-168$]; 15:54,1.1[Ex-155#]; 15:54,2.2[Ex-168$]; 15:54,3.2[Ex-168$]; 15:54,4.2[Ex-168$]; 16:4,1.2[Ex-168$]; 16:12,1.2[Ex-168$]; Count = 124

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms D06^c% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-162; (2) Ex-168$; (3) Ex-152; (4) Ex-165#; (5) Ex-155#; (6) Ex-169$; (7) Ex-170$; (8) Ex-161;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

24.1; 50.1; 54.1; 215.1; 223.1; 466.1; Total = 6

Variants different from Parent[1]: 1:1,1.2[Ex-168$]; 1:8,1.2[Ex-168$]; 1:8,2.2[Ex-168$]; 1:15,1.2[Ex-168$]; 1:18,3.1[Ex-168$]; 1:26,1.2[Ex-168$]; 1:29,1.1[Ex-168$]; 2:1,1.2[Ex-168$]; 2:12,1.2[Ex-168$]; 2:12,2.2[Ex-168$]; 3:3,1.2[Ex-168$]; 3:3,3.2[Ex-168$]; 3:5,1.2[Ex-168$]; 3:5,2.2[Ex-168$]; 3:17,1.2[Ex-168$]; 3:17,2.2[Ex-168$]; 3:18,1.2[Ex-168$]; 4:2,2.2[Ex-165#]; 5:11,2.2[Ex-165#]; 5:12,1.2[Ex-152]; 6:2,2.2[Ex-165#]; 6:5,2.2[Ex-168$]; 6:16,1.2[Ex-168$]; 7:2,1.1[Ex-168$]; 7:5,3.1[Ex-165#]; 7:17,5.1[Ex-168$]; 7:22,1.3[Ex-169$]; 7:28,1.2[Ex-168$]; 7:29,1.2[Ex-168$]; 7:31,2.1[Ex-168$]; 7:32,1.1[Ex-168$]; 7:34,2.3[Ex-168$]; 7:34,3.2[Ex-168$]; 7:35,1.1[Ex-152]; 8:2,2.1[Ex-152]; 8:10,1.1[Ex-168$]; 9:15,1.1[Ex-165#]; 9:18,1.3[Ex-170$]; 9:22,1.2[Ex-152]; 10:10,1.2[Ex-169$]; 10:11,1.2[Ex-168$]; 10:11,2.2[Ex-168$]; 10:13,1.1[Ex-168$]; 10:13,2.2[Ex-168$]; 10:19,1.1[Ex-168$]; 10:19,3.1[Ex-168$]; 10:20,1.1[Ex-168$]; 10:27,1.1[Ex-168$]; 11:15,1.2[Ex-152]; 11:19,1.1[Ex-168$]; 11:22,1.1[Ex-168$]; 11:24,2.1[Ex-152]; 12:2,3.1[Ex-168$]; 12:3,1.2[Ex-168$]; 12:3,2.2[Ex-152]; 12:3,3.2[Ex-168$]; 12:9,2.1[Ex-152]; 12:9,3.2[Ex-168$]; 12:10,1.2[Ex-168$]; 12:12,1.2[Ex-152]; 12:21,1.1[Ex-168$]; 12:24,1.2[Ex-168$]; 12:26,1.1[Ex-168$]; 13:4,1.1[Ex-168$]; 13:12,1.2[Ex-168$]; 14:32,1.2[Ex-168$]; 14:34,1.2[Ex-168$]; 14:34,2.2[Ex-168$]; 14:40,1.2[Ex-168$]; 15:2,1.2[Ex-168$]; 15:5,2.1[Ex-168$]; 15:14,1.1[Ex-168$]; 15:15,1.2[Ex-169$]; 15:24,1.1[Ex-168$]; 15:27,1.1[Ex-168$]; 15:31,2.2[Ex-152]; 15:47,2.1[Ex-168$]; 15:50,1.2[Ex-168$]; 15:54,1.1[Ex-152]; 16:4,1.2[Ex-168$]; 16:19,5.1[Ex-152]; Count = 81

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms D06^1 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-166#; (2) Ex-168$; (3) Ex-165#; (4) Ex-155#; (5) Ex-169$; (6) Ex-170$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

77.1; 96.1; 123.1; 125.1; 126.1; 135.1; 136.1; 141.1; 152.1; 153.1; 159.1; 163.1; 170.1; 171.1; 173.2; 176.1; 195.1; 209.1; 219.1; 220.1; 229.2; 240.1; 257.1; 263.1; 265.1; 267.1; 269.1; 274.1; 276.1; 282.1; 289.1; 292.1; 296.1; 298.1; 302.1; 316.1; 318.1; 323.1; 326.1; 327.1; 328.1; 331.1; 338.1; 342.1; 345.1; 348.1; 349.1; 365.1; 367.1; 374.1; 377.1; 382.1; 395.1; 399.0; 407.1; 408.1; 412.1; 419.1; 421.1; 434.1; 440.0; 443.1; 458.1; 461.1; 465.1; Total = 65

Variants different from Parent[1]: 1:1,1.2[Ex-168$]; 1:8,1.2[Ex-168$]; 1:8,2.2[Ex-168$]; 1:15,1.2[Ex-168$]; 1:26,1.2[Ex-168$]; 1:29,1.1[Ex-168$]; 1:30,1.2[Ex-168$]; 2:1,1.2[Ex-168$]; 2:12,1.2[Ex-168$]; 2:12,2.2[Ex-168$]; 2:13,1.2[Ex-169$]; 3:3,2.2[Ex-169$]; 3:5,1.2[Ex-168$]; 3:5,2.2[Ex-168$]; 3:5,3.2[Ex-169$]; 3:17,1.2[Ex-168$]; 3:17,2.2[Ex-168$]; 3:18,1.2[Ex-168$]; 4:2,2.2[Ex-165#]; 4:9,1.2[Ex-155#]; 5:3,1.2[Ex-169$]; 5:9,1.2; 5:10,1.2[Ex-155#]; 5:11,2.2[Ex-165#]; 5:12,1.2[Ex-169$]; 6:2,2.2[Ex-165#]; 6:5,2.2[Ex-168$]; 6:16,1.2[Ex-168$]; 7:2,1.1[Ex-168$]; 7:5,3.1[Ex-165#]; 7:17,5.1[Ex-168$]; 7:22,1.3[Ex-169$]; 7:28,1.2[Ex-168$]; 7:29,1.2[Ex-168$]; 7:31,2.1[Ex-168$]; 7:32,1.1[Ex-168$]; 7:34,2.3[Ex-168$]; 7:34,3.2[Ex-168$]; 7:35,1.1[Ex-165#]; 7:39,1.2[Ex-155#]; 8:2,2.1[Ex-165#]; 8:10,1.1[Ex-168$]; 9:1,1.2[Ex-169$]; 9:10,1.2[Ex-155#]; 9:18,1.3[Ex-170$]; 9:22,1.2[Ex-155#]; 10:8,1.2[Ex-155#]; 10:10,1.2[Ex-169$]; 10:11,1.2[Ex-168$]; 10:11,2.2[Ex-168$]; 10:13,1.1[Ex-168$]; 10:13,2.2[Ex-168$]; 10:19,1.1[Ex-168$]; 10:19,3.1[Ex-168$]; 10:20,1.1[Ex-168$]; 10:27,1.1[Ex-168$]; 11:14,1.2[Ex-169$]; 11:15,1.2[Ex-169$]; 11:19,1.1[Ex-168$]; 11:22,1.1[Ex-168$]; 11:24,2.1[Ex-165#]; 11:26,1.2[Ex-168$]; 12:2,3.1[Ex-168$]; 12:3,1.2[Ex-168$]; 12:3,2.2[Ex-169$]; 12:3,3.2[Ex-168$]; 12:9,2.1[Ex-165#]; 12:9,3.2[Ex-168$]; 12:10,1.2[Ex-168$]; 12:11,1.1[Ex-165#]; 12:12,1.2[Ex-155#]; 12:21,1.1[Ex-168$]; 12:24,1.2[Ex-168$]; 12:26,1.1[Ex-168$]; 13:4,1.1[Ex-168$]; 13:8,3.2[Ex-169$]; 13:10,1.2[Ex-168$]; 13:12,1.2[Ex-168$]; 14:32,1.2[Ex-168$]; 14:34,1.2[Ex-168$]; 14:34,2.2[Ex-168$]; 14:39,1.1[Ex-168$]; 14:40,1.2[Ex-168$]; 15:5,2.1[Ex-168$]; 15:10,2.1[Ex-168$]; 15:14,1.1[Ex-168$]; 15:15,1.2[Ex-169$]; 15:24,1.1[Ex-168$]; 15:27,1.1[Ex-168$]; 15:31,2.2[Ex-169$]; 15:47,1.3[Ex-155#]; 15:47,2.1[Ex-168$]; 15:50,1.2[Ex-168$]; 15:54,1.1[Ex-165#]; 16:4,1.2[Ex-168$]; Count = 95

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms D06^2 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-151; (2) Ex-157; (3) Ex-168$; (4) Ex-164; (5) Ex-165#; (6) Ex-169$; (7) Ex-158; (8) Ex-170$; (9) Ex-154; (10) Ex-166#; (11) Ex-161;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

3.1; 27.1; 31.2; 46.1; 54.1; 74.1; 77.1; 94.2; 107.1; 112.2; 114.1; 118.2; 122.1; 123.1; 124.1; 138.1; 157.1; 158.1; 160.2; 163.1; 194.1; 195.1; 197.2; 210.2; 224.2; 232.1; 243.1; 254.2; 269.1; 285.1; 288.1; 307.1; 333.1; 355.1; 379.1; 380.2; 382.1; 393.1; 419.1; 425.1; 429.1; 448.2; 464.1; 467.2; Total = 44

Variants different from Parent[1]: 1:1,1.2[Ex-157]; 1:1,2.1[Ex-168$]; 1:8,1.2[Ex-168$]; 1:8,2.2[Ex-168$]; 1:26,1.2[Ex-168$]; 2:2,1.1[Ex-168$]; 2:4,1.1[Ex-168$]; 2:4,2.2[Ex-168$]; 2:12,1.2[Ex-168$]; 2:12,2.2[Ex-168$]; 3:4,1.2[Ex-168$]; 3:5,3.1[Ex-157]; 3:17,1.2[Ex-168$]; 3:17,2.2[Ex-157]; 3:18,1.2[Ex-168$]; 4:2,2.2[Ex-157]; 5:1,1.1[Ex-157]; 5:2,1.1[Ex-157]; 5:5,1.3[Ex-166#]; 5:7,1.1[Ex-157]; 5:7,2.1[Ex-157]; 5:10,3.1[Ex-157]; 5:11,1.1[Ex-157]; 5:11,2.2[Ex-157]; 6:2,2.2[Ex-157]; 6:5,2.2[Ex-168$]; 6:8,1.1[Ex-157]; 6:10,2.1[Ex-157]; 6:16,1.2[Ex-168$]; 7:3,1.1[Ex-157]; 7:5,2.1[Ex-157]; 7:5,3.1[Ex-157]; 7:7,2.1[Ex-157]; 7:7,3.1[Ex-157]; 7:10,1.2[Ex-157]; 7:13,4.1[Ex-157]; 7:14,1.2[Ex-166#]; 7:17,3.1[Ex-157]; 7:17,4.1[Ex-157]; 7:22,1.3[Ex-169$]; 7:28,1.2[Ex-168$]; 7:29,1.2[Ex-168$]; 7:34,3.2[Ex-157]; 7:37,1.1[Ex-157]; 7:38,1.1[Ex-157]; 7:38,2.2[Ex-168$]; 7:38,4.1[Ex-157]; 8:2,2.1[Ex-157]; 8:4,1.1[Ex-157]; 8:11,2.1[Ex-157]; 9:7,2.2[Ex-158]; 9:8,1.3[Ex-166#]; 9:13,2.1[Ex-157]; 9:16,2.1[Ex-158]; 9:18,1.3[Ex-170$]; 9:21,4.1[Ex-157]; 9:22,2.2[Ex-166#]; 9:23,1.1[Ex-157]; 10:2,1.1[Ex-157]; 10:10,1.2[Ex-169$]; 10:10,2.2[Ex-157]; 10:11,1.2[Ex-168$]; 10:13,2.2[Ex-168$]; 10:17,1.2[Ex-166#]; 10:19,1.2[Ex-166#]; 10:19,3.2[Ex-166#]; 10:20,1.1[Ex-168$]; 10:20,3.2[Ex-168$]; 10:23,1.1[Ex-157]; 10:23,2.1[Ex-157]; 10:28,3.1[Ex-157]; 11:23,1.2[Ex-166#]; 11:24,1.1[Ex-157]; 11:27,1.1[Ex-157]; 11:27,2.2[Ex-168$]; 11:31,1.1[Ex-157]; 12:3,1.2[Ex-168$]; 12:6,2.1[Ex-157]; 12:10,1.2[Ex-168$]; 12:10,2.2[Ex-164]; 12:10,3.2[Ex-164]; 12:10,5.1[Ex-168$]; 12:24,1.2[Ex-168$]; 12:25,1.1[Ex-157]; 13:2,1.1[Ex-168$]; 13:3,1.2[Ex-166#]; 13:12,1.2[Ex-168$]; 14:5,1.1[Ex-157]; 14:11,1.2[Ex-168$]; 14:32,1.2[Ex-168$]; 14:34,1.2[Ex-168$]; 14:34,3.1[Ex-157]; 14:40,1.2[Ex-168$]; 15:14,1.1[Ex-157]; 15:15,1.2[Ex-169$]; 15:24,1.1[Ex-157]; 15:34,1.1[Ex-164]; 15:50,1.2[Ex-168$]; 15:52,2.2[Ex-157]; 16:2,1.1[Ex-157]; 16:7,1.1[Ex-157]; 16:8,1.2[Ex-169$]; 16:15,1.2[Ex-166#]; 16:17,1.1[Ex-168$]; 16:17,2.2[Ex-157]; 16:19,3.1[Ex-165#]; 16:22,1.2[Ex-168$]; Count = 107

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms F\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-156; (2) Ex-151; (3) Ex-168$; (4) Ex-153; (5) Ex-155#; (6) Ex-157; (7) Ex-165#; (8) Ex-170$; (9) Ex-169$; (10) Ex-158; (11) Ex-154; (12) Ex-152; (13) Ex-161;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

43.1; 66.1; 213.1; 214.1; 217.1; 315.1; 337.1; 380.1; 390.1; 392.1; 393.1; 399.2; 404.1; 405.1; 416.1; Total = 15

Variants different from Parent[1]: 1:2,1.2[Ex-151]; 1:6,1.2[Ex-168$]; 1:8,1.2[Ex-168$]; 1:8,2.2[Ex-168$]; 1:9,1.2[Ex-168$]; 1:11,1.1[Ex-151]; 1:17,1.2[Ex-168$]; 1:18,1.2[Ex-168$]; 1:18,2.1[Ex-151]; 1:22,1.2[Ex-168$]; 1:26,1.2[Ex-168$]; 1:30,1.2[Ex-168$]; 2:1,1.2[Ex-151]; 2:12,1.2[Ex-168$]; 2:12,2.2[Ex-168$]; 3:3,1.2[Ex-168$]; 3:3,3.2[Ex-168$]; 3:5,1.2[Ex-151]; 3:5,2.2[Ex-151]; 3:17,1.2[Ex-168$]; 3:17,2.2[Ex-168$]; 4:2,2.2[Ex-153]; 4:5,1.2[Ex-168$]; 4:17,2.3[Ex-170$]; 5:4,1.3[Ex-151]; 5:5,1.4[Ex-168$]; 5:8,2.2[Ex-168$]; 5:10,2.1[Ex-168$]; 5:11,2.2[Ex-153]; 6:2,2.2[Ex-157]; 6:5,2.2[Ex-168$]; 6:15,1.2[Ex-168$]; 6:15,3.3[Ex-169$]; 7:2,2.2[Ex-168$]; 7:5,3.1[Ex-153]; 7:14,2.1[Ex-168$]; 7:21,1.2[Ex-168$]; 7:22,1.3[Ex-169$]; 7:28,1.2[Ex-168$]; 7:28,2.2[Ex-168$]; 7:29,1.2[Ex-168$]; 7:29,2.2[Ex-168$]; 7:31,2.1[Ex-151]; 7:34,1.2[Ex-151]; 7:35,1.1[Ex-151]; 7:35,2.2[Ex-151]; 7:36,1.2[Ex-168$]; 7:39,1.2[Ex-151]; 7:39,2.2[Ex-151]; 8:2,2.1[Ex-155#]; 8:11,1.4[Ex-151]; 9:7,1.1[Ex-153]; 9:9,1.3[Ex-169$]; 9:13,1.1[Ex-168$]; 9:15,1.3[Ex-169$]; 9:16,1.2[Ex-168$]; 9:16,2.1[Ex-158]; 9:18,1.3[Ex-170$]; 9:18,2.2[Ex-151]; 9:20,1.2[Ex-169$]; 9:22,1.2[Ex-151]; 10:10,1.2[Ex-153]; 10:11,1.2[Ex-168$]; 10:11,2.2[Ex-151]; 10:13,2.2[Ex-168$]; 10:16,1.2[Ex-168$]; 10:20,1.1[Ex-168$]; 10:20,3.2[Ex-168$]; 10:31,1.2[Ex-168$]; 11:20,1.3[Ex-168$]; 11:23,1.3[Ex-168$]; 11:23,3.2[Ex-168$]; 11:24,2.1[Ex-151]; 12:2,3.2[Ex-169$]; 12:3,1.2[Ex-168$]; 12:9,2.1[Ex-151]; 12:9,3.2[Ex-151]; 12:10,1.2[Ex-168$]; 12:19,1.2[Ex-168$]; 12:20,1.1[Ex-151]; 12:24,1.2[Ex-168$]; 12:25,1.2[Ex-151]; 12:31,2.2[Ex-168$]; 13:4,1.1[Ex-151]; 13:8,3.2[Ex-153]; 13:11,1.2[Ex-151]; 14:2,2.2[Ex-168$]; 14:4,1.2[Ex-168$]; 14:5,1.5[Ex-170$]; 14:6,1.2[Ex-168$]; 14:7,1.1[Ex-151]; 14:14,1.2[Ex-168$]; 14:15,1.2[Ex-168$]; 14:15,2.2[Ex-168$]; 14:19,1.1[Ex-153]; 14:28,1.2[Ex-168$]; 14:33,1.2[Ex-168$]; 14:39,3.3[Ex-168$]; 15:10,1.3[Ex-169$]; 15:12,1.2[Ex-168$]; 15:14,1.1[Ex-168$]; 15:15,1.1[Ex-151]; 15:24,1.1[Ex-168$]; 15:25,1.2[Ex-168$]; 15:27,1.1[Ex-151]; 15:28,1.2[Ex-168$]; 15:31,2.2[Ex-151]; 15:34,1.2[Ex-151]; 15:50,1.2[Ex-168$]; 15:50,2.3[Ex-169$]; 15:51,3.3[Ex-170$]; 15:54,1.3[Ex-157]; 15:54,3.2[Ex-168$]; 16:4,1.2[Ex-151]; 16:6,3.3[Ex-169$]; 16:12,1.2[Ex-168$]; 16:15,1.3[Ex-169$]; 16:24,1.1[Ex-168$]; Count = 118

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms G012\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-156; (2) Ex-151; (3) Ex-144; (4) Ex-168$; (5) Ex-164; (6) Ex-153; (7) Ex-155#; (8) Ex-157; (9) Ex-165#; (10) Ex-170$; (11) Ex-169$; (12) Ex-158; (13) Ex-152; (14) Ex-154; (15) Ex-161;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

43.1; 66.1; 213.1; 214.1; 217.1; 315.1; 337.1; 380.1; 390.1; 392.1; 393.1; 399.2; 404.1; 405.1; 416.1; Total = 15

Variants different from Parent[1]: 1:2,1.2[Ex-151]; 1:6,1.2[Ex-144]; 1:8,1.2[Ex-168$]; 1:8,2.2[Ex-168$]; 1:9,1.2[Ex-168$]; 1:11,1.1[Ex-151]; 1:17,1.2[Ex-144]; 1:18,1.2[Ex-144]; 1:18,2.1[Ex-151]; 1:22,1.2[Ex-168$]; 1:26,1.2[Ex-168$]; 1:30,1.2[Ex-168$]; 2:1,1.2[Ex-151]; 2:12,1.2[Ex-168$]; 2:12,2.2[Ex-168$]; 3:3,1.2[Ex-168$]; 3:3,3.2[Ex-168$]; 3:5,1.2[Ex-151]; 3:5,2.2[Ex-151]; 3:17,1.2[Ex-168$]; 3:17,2.2[Ex-168$]; 4:2,2.2[Ex-164]; 4:5,1.2[Ex-168$]; 4:13,2.2[Ex-168$]; 4:17,2.3[Ex-170$]; 5:4,1.3[Ex-151]; 5:5,1.4[Ex-168$]; 5:8,2.2[Ex-168$]; 5:10,2.1[Ex-144]; 5:11,2.2[Ex-164]; 6:2,2.2[Ex-164]; 6:5,2.2[Ex-168$]; 6:15,1.2[Ex-168$]; 6:15,3.3[Ex-169$]; 7:2,2.2[Ex-168$]; 7:5,3.1[Ex-144]; 7:14,2.1[Ex-144]; 7:21,1.2[Ex-168$]; 7:22,1.3[Ex-169$]; 7:28,1.2[Ex-168$]; 7:28,2.2[Ex-144]; 7:29,1.2[Ex-168$]; 7:29,2.2[Ex-168$]; 7:31,2.1[Ex-151]; 7:34,1.2[Ex-151]; 7:35,1.1[Ex-151]; 7:35,2.2[Ex-151]; 7:36,1.2[Ex-168$]; 7:39,1.2[Ex-151]; 7:39,2.2[Ex-151]; 8:2,2.1[Ex-144]; 8:11,1.4[Ex-151]; 9:7,1.1[Ex-144]; 9:9,1.3[Ex-169$]; 9:13,1.1[Ex-144]; 9:15,1.3[Ex-169$]; 9:16,1.2[Ex-168$]; 9:16,2.1[Ex-144]; 9:18,1.3[Ex-170$]; 9:18,2.2[Ex-151]; 9:20,1.2[Ex-169$]; 9:22,1.2[Ex-151]; 10:10,1.2[Ex-153]; 10:11,1.2[Ex-168$]; 10:11,2.2[Ex-151]; 10:13,2.2[Ex-168$]; 10:16,1.2[Ex-168$]; 10:20,1.1[Ex-144]; 10:20,3.2[Ex-168$]; 10:31,1.2[Ex-168$]; 11:20,1.3[Ex-168$]; 11:23,1.3[Ex-168$]; 11:23,3.2[Ex-168$]; 11:24,2.1[Ex-151]; 12:3,1.2[Ex-168$]; 12:3,2.2[Ex-151]; 12:9,2.1[Ex-151]; 12:9,3.2[Ex-151]; 12:10,1.2[Ex-168$]; 12:19,1.2[Ex-144]; 12:20,1.1[Ex-151]; 12:24,1.2[Ex-168$]; 12:25,1.2[Ex-151]; 12:31,2.2[Ex-168$]; 13:4,1.1[Ex-151]; 13:8,3.2[Ex-153]; 13:11,1.2[Ex-151]; 14:2,2.2[Ex-168$]; 14:4,1.2[Ex-168$]; 14:5,1.5[Ex-170$]; 14:6,1.2[Ex-168$]; 14:7,1.1[Ex-151]; 14:14,1.2[Ex-144]; 14:15,1.2[Ex-168$]; 14:15,2.2[Ex-168$]; 14:19,1.1[Ex-144]; 14:23,1.2[Ex-144]; 14:28,1.2[Ex-144]; 14:33,1.2[Ex-168$]; 14:39,3.3[Ex-168$]; 15:10,1.3[Ex-169$]; 15:12,1.2[Ex-168$]; 15:14,1.1[Ex-168$]; 15:15,1.1[Ex-151]; 15:24,1.1[Ex-144]; 15:25,1.2[Ex-168$]; 15:27,1.1[Ex-151]; 15:28,1.2[Ex-144]; 15:31,2.2[Ex-151]; 15:34,1.2[Ex-151]; 15:50,1.2[Ex-168$]; 15:50,2.3[Ex-169$]; 15:51,3.3[Ex-170$]; 15:54,1.3[Ex-157]; 15:54,3.2[Ex-168$]; 16:4,1.2[Ex-151]; 16:6,3.3[Ex-169$]; 16:12,1.2[Ex-168$]; 16:15,1.3[Ex-169$]; 16:24,1.3[Ex-169$]; Count = 120

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms G012^c \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-156; (2) Ex-151; (3) Ex-144; (4) Ex-168$; (5) Ex-164; (6) Ex-153; (7) Ex-155#; (8) Ex-157; (9) Ex-165#; (10) Ex-170$; (11) Ex-169$; (12) Ex-158; (13) Ex-152; (14) Ex-154; (15) Ex-161;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

43.1; 66.1; 213.1; 214.1; 217.1; 315.1; 337.1; 380.1; 390.1; 392.1; 393.1; 399.2; 404.1; 405.1; 416.1; Total = 15

Variants different from Parent[1]: 1:2,1.2[Ex-151]; 1:6,1.2[Ex-144]; 1:8,1.2[Ex-168$]; 1:8,2.2[Ex-168$]; 1:9,1.2[Ex-168$]; 1:11,1.1[Ex-151]; 1:17,1.2[Ex-144]; 1:18,2.1[Ex-151]; 1:22,1.2[Ex-168$]; 1:26,1.2[Ex-168$]; 1:30,1.2[Ex-168$]; 2:1,1.2[Ex-151]; 2:12,1.2[Ex-168$]; 2:12,2.2[Ex-168$]; 3:3,1.2[Ex-168$]; 3:3,3.2[Ex-168$]; 3:5,1.2[Ex-151]; 3:5,2.2[Ex-151]; 3:17,1.2[Ex-168$]; 3:17,2.2[Ex-168$]; 4:2,2.2[Ex-164]; 4:5,1.2[Ex-168$]; 4:13,2.2[Ex-168$]; 4:17,2.3[Ex-170$]; 5:4,1.3[Ex-151]; 5:5,1.4[Ex-168$]; 5:8,2.2[Ex-168$]; 5:10,2.1[Ex-144]; 5:11,2.2[Ex-164]; 6:2,2.2[Ex-164]; 6:5,2.2[Ex-168$]; 6:15,1.2[Ex-168$]; 6:15,3.3[Ex-169$]; 7:2,2.2[Ex-168$]; 7:5,3.1[Ex-144]; 7:14,2.1[Ex-144]; 7:21,1.2[Ex-168$]; 7:22,1.3[Ex-169$]; 7:28,1.2[Ex-168$]; 7:28,2.2[Ex-144]; 7:29,1.2[Ex-168$]; 7:29,2.2[Ex-168$]; 7:31,2.1[Ex-151]; 7:34,1.2[Ex-151]; 7:35,1.1[Ex-151]; 7:35,2.2[Ex-151]; 7:36,1.2[Ex-168$]; 7:39,1.2[Ex-151]; 7:39,2.2[Ex-151]; 8:2,2.1[Ex-144]; 8:11,1.4[Ex-151]; 9:7,1.1[Ex-144]; 9:9,1.3[Ex-169$]; 9:13,1.1[Ex-144]; 9:15,1.3[Ex-169$]; 9:16,1.2[Ex-168$]; 9:16,2.1[Ex-144]; 9:18,1.3[Ex-170$]; 9:18,2.2[Ex-151]; 9:22,1.2[Ex-151]; 10:10,1.2[Ex-153]; 10:11,1.2[Ex-168$]; 10:11,2.2[Ex-151]; 10:13,2.2[Ex-168$]; 10:16,1.2[Ex-168$]; 10:20,1.1[Ex-144]; 10:20,3.2[Ex-168$]; 10:31,1.2[Ex-168$]; 11:20,1.3[Ex-168$]; 11:23,1.3[Ex-168$]; 11:23,3.2[Ex-168$]; 11:24,2.1[Ex-151]; 12:2,3.2[Ex-169$]; 12:3,1.2[Ex-168$]; 12:3,2.2[Ex-151]; 12:9,2.1[Ex-151]; 12:9,3.2[Ex-151]; 12:10,1.2[Ex-168$]; 12:19,1.2[Ex-144]; 12:20,1.1[Ex-151]; 12:24,1.2[Ex-168$]; 12:25,1.2[Ex-151]; 12:31,2.2[Ex-168$]; 13:4,1.1[Ex-151]; 13:8,3.2[Ex-153]; 13:11,1.2[Ex-151]; 14:2,2.2[Ex-168$]; 14:4,1.2[Ex-168$]; 14:5,1.5[Ex-170$]; 14:6,1.2[Ex-168$]; 14:7,1.1[Ex-151]; 14:14,1.2[Ex-144]; 14:15,1.2[Ex-168$]; 14:15,2.2[Ex-168$]; 14:19,1.1[Ex-144]; 14:28,1.2[Ex-144]; 14:33,1.2[Ex-168$]; 14:39,3.3[Ex-168$]; 15:10,1.3[Ex-169$]; 15:12,1.2[Ex-168$]; 15:14,1.1[Ex-168$]; 15:15,1.1[Ex-151]; 15:24,1.1[Ex-144]; 15:25,1.2[Ex-168$]; 15:27,1.1[Ex-151]; 15:28,1.2[Ex-144]; 15:31,2.2[Ex-151]; 15:34,1.2[Ex-151]; 15:50,1.2[Ex-168$]; 15:50,2.3[Ex-169$]; 15:51,3.3[Ex-170$]; 15:54,1.3[Ex-157]; 15:54,3.2[Ex-168$]; 16:4,1.2[Ex-151]; 16:6,3.3[Ex-169$]; 16:12,1.2[Ex-168$]; 16:15,1.3[Ex-169$]; 16:24,1.3[Ex-169$]; Count = 118

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms H015\*% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-155#; (2) Ex-166#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

2.0; 4.0; 25.0; 33.0; 35.0; 49.0; 56.0; 58.0; 59.0; 63.0; 78.0; 79.0; 82.0; 90.0; 96.0; 99.0; 100.0; 104.0; 140.0; 143.0; 144.0; 145.0; 151.0; 153.0; 169.0; 177.0; 180.0; 182.0; 185.0; 186.0; 200.0; 223.0; 224.0; 226.0; 231.0; 237.0; 238.0; 239.0; 248.0; 260.0; 271.0; 272.0; 290.0; 291.0; 304.0; 306.0; 311.0; 313.0; 321.0; 322.0; 324.0; 329.0; 332.0; 340.0; 341.0; 347.0; 356.0; 359.0; 366.0; 370.0; 400.0; 409.0; 433.0; 445.0; 447.0; 448.0; Total = 66

Variants different from Parent[1]: 11:15,1.3[Ex-166#]; Count = 1

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms H015^c% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-155#; (2) Ex-169$; (3) Ex-166#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

2.0; 4.0; 25.0; 33.0; 35.0; 49.0; 56.0; 58.0; 59.0; 63.0; 78.0; 79.0; 82.0; 90.0; 96.0; 99.0; 100.0; 104.0; 140.0; 143.0; 144.0; 145.0; 151.0; 153.0; 169.0; 177.0; 180.0; 182.0; 185.0; 186.0; 200.0; 223.0; 224.0; 226.0; 231.0; 237.0; 238.0; 239.0; 248.0; 260.0; 271.0; 272.0; 290.0; 291.0; 304.0; 306.0; 311.0; 313.0; 321.0; 322.0; 324.0; 329.0; 332.0; 340.0; 341.0; 347.0; 356.0; 359.0; 366.0; 370.0; 400.0; 409.0; 433.0; 445.0; 447.0; 448.0; Total = 66

Variants different from Parent[1]: 10:28,3.2[Ex-169$]; 11:15,1.3[Ex-166#]; Count = 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms K\*% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-165#; (2) Ex-168$; (3) Ex-155#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

16.0; 30.0; 31.0; 41.0; 64.0; 67.0; 75.0; 105.0; 108.0; 115.0; 148.0; 156.0; 204.0; 207.0; 210.0; 218.0; 227.0; 250.0; 255.0; 262.0; 266.0; 281.0; 309.0; 310.0; 343.0; 352.0; 376.0; 387.0; 403.0; 410.0; 424.0; 468.0; Total = 32

Variants different from Parent[1]: 6:16,1.2[Ex-168$]; 7:15,1.1[Ex-168$]; 7:39,1.3[Ex-168$]; 8:2,2.2[Ex-168$]; 9:25,1.2[Ex-168$]; 10:19,2.1[Ex-168$]; 12:2,1.2[Ex-168$]; 13:11,1.2[Ex-155#]; 14:18,1.2[Ex-168$]; 14:18,2.1[Ex-168$]; 15:14,1.1[Ex-168$]; 15:45,1.2[Ex-168$]; 16:2,2.2[Ex-168$]; 16:22,1.2[Ex-168$]; Count = 14

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms L019\*% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-148; (2) Ex-168$; (3) Ex-165#; (4) Ex-169$; (5) Ex-153;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

51.1; 79.1; 84.1; 89.1; 229.0; 266.0; 345.1; 348.0; 367.0; 382.1; Total = 10

Variants different from Parent[1]: 1:23,1.1[Ex-165#]; 2:12,2.2[Ex-168$]; 3:17,1.2[Ex-168$]; 5:10,3.1[Ex-168$]; 5:11,1.1[Ex-168$]; 5:11,2.2[Ex-165#]; 5:13,1.2[Ex-168$]; 6:16,1.2[Ex-168$]; 6:19,1.2[Ex-168$]; 7:31,2.2; 9:12,1.2[Ex-169$]; 10:13,4.1[Ex-168$]; 10:19,2.1[Ex-168$]; 11:5,1.1[Ex-168$]; 11:27,2.2[Ex-168$]; 12:12,1.1[Ex-168$]; 13:12,1.4[Ex-169$]; 14:18,1.2[Ex-168$]; 16:22,1.2[Ex-168$]; Count = 19

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms I% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-158; (2) Ex-169$; (3) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

20.0; 30.0; 33.0; 39.0; 47.0; 49.0; 50.0; 65.0; 69.0; 75.0; 82.0; 86.0; 89.0; 101.0; 108.0; 115.0; 116.0; 125.0; 132.0; 142.0; 143.0; 166.0; 173.0; 175.0; 190.0; 202.0; 219.0; 229.0; 259.0; 266.0; 268.0; 285.0; 299.0; 321.0; 335.0; 336.0; 337.0; 349.0; 353.0; 364.0; 365.0; 376.0; 388.0; 410.0; 412.0; 415.0; 417.0; 431.0; 435.0; 452.0; 460.0; Total = 51

Variants different from Parent[1]: 11:27,1.2[Ex-169$]; 14:12,2.2[Ex-168$]; Count = 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms P025\*% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-161; (2) Ex-164; (3) Ex-168$; (4) Ex-169$; (5) Ex-152; (6) Ex-166#; (7) Ex-155#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

2.0; 84.1; 88.0; 128.0; 146.0; 154.1; 248.0; 254.0; 264.1; 354.0; 372.0; 397.0; 401.1; 407.0; 414.1; 440.0; Total = 16

Variants different from Parent[1]: 2:2,1.1[Ex-164]; 2:12,2.2[Ex-168$]; 2:15,1.5[Ex-169$]; 3:4,2.2[Ex-168$]; 3:16,1.2[Ex-168$]; 3:17,1.2[Ex-168$]; 5:4,2.2[Ex-168$]; 5:5,1.4[Ex-168$]; 5:10,3.2[Ex-169$]; 6:1,1.2[Ex-168$]; 6:11,1.3[Ex-166#]; 6:14,1.3[Ex-169$]; 6:15,2.1[Ex-164]; 6:15,3.2[Ex-168$]; 7:13,1.1[Ex-169$]; 7:34,2.1[Ex-169$]; 7:34,3.2[Ex-168$]; 8:11,1.2[Ex-168$]; 8:11,2.2[Ex-168$]; 9:16,2.3[Ex-168$]; 10:9,2.2[Ex-168$]; 10:10,2.1[Ex-164]; 10:19,2.1[Ex-168$]; 10:23,1.2[Ex-152]; 10:23,2.2[Ex-152]; 11:15,1.3[Ex-166#]; 11:25,1.2[Ex-168$]; 12:10,4.2[Ex-168$]; 12:21,1.2[Ex-166#]; 13:8,3.1[Ex-164]; 13:12,1.4[Ex-169$]; 14:12,1.2[Ex-168$]; 14:15,2.2[Ex-168$]; 14:16,2.1[Ex-168$]; 14:18,2.1[Ex-164]; 15:52,2.2[Ex-168$]; 16:17,1.1[Ex-168$]; Count = 37

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 044\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-152; (2) Ex-168$; (3) Ex-169$; (4) Ex-166#; (5) Ex-161; (6) Ex-163;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

17.2; 34.1; 51.2; 60.2; 61.2; 68.2; 89.2; 91.2; 92.2; 93.2; 94.2; 106.2; 109.2; 125.2; 134.2; 135.2; 141.2; 148.2; 149.2; 172.2; 173.1; 183.1; 187.2; 211.1; 215.2; 216.2; 225.2; 234.2; 235.2; 236.2; 241.2; 246.2; 252.2; 256.2; 273.2; 276.2; 278.2; 282.2; 289.2; 301.2; 312.2; 318.2; 319.2; 345.2; 348.1; 362.2; 365.2; 375.2; 376.2; 378.1; 384.2; 394.2; 395.2; 399.2; 418.2; 427.2; 450.2; 454.2; 465.2; Total = 59

Variants different from Parent[1]: 2:2,1.4; 4:6,2.1[Ex-166#]; 5:4,2.2[Ex-168$]; 5:13,1.2[Ex-168$]; 6:15,3.2[Ex-168$]; 6:16,1.2[Ex-168$]; 6:19,1.2[Ex-168$]; 7:5,2.1[Ex-168$]; 7:14,2.1[Ex-168$]; 7:17,3.3[Ex-169$]; 7:17,4.3[Ex-169$]; 7:18,1.2[Ex-168$]; 7:29,1.2[Ex-168$]; 7:31,2.3[Ex-166#]; 8:2,4.2; 8:4,1.1[Ex-168$]; 8:7,1.1[Ex-161]; 8:8,1.2[Ex-169$]; 9:7,2.2[Ex-166#]; 10:10,2.2[Ex-169$]; 12:6,2.1[Ex-168$]; 12:9,3.1[Ex-166#]; 12:25,1.1[Ex-168$]; 12:26,1.2[Ex-166#]; 12:27,1.2[Ex-168$]; 14:25,3.2[Ex-169$]; 14:32,1.2[Ex-168$]; 16:2,1.1[Ex-168$]; 16:22,1.2[Ex-168$]; Count = 29

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 048% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-165#; (2) Ex-155#; (3) Ex-168$; (4) Ex-170$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

16.0; 30.0; 31.0; 41.0; 64.0; 67.0; 75.0; 105.0; 108.0; 115.0; 148.0; 156.0; 204.0; 207.0; 210.0; 218.0; 227.0; 250.0; 255.0; 262.0; 266.0; 281.0; 309.0; 310.0; 343.0; 352.0; 376.0; 387.0; 403.0; 410.0; 424.0; 468.0; Total = 32

Variants different from Parent[1]: 5:7,1.2[Ex-155#]; 5:11,2.1[Ex-155#]; 14:16,1.2[Ex-168$]; 14:18,2.1[Ex-168$]; 14:19,1.3[Ex-168$]; 14:39,1.1[Ex-168$]; 15:6,1.2[Ex-155#]; Count = 7

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 075% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-151; (2) Ex-168$; (3) Ex-169$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

3.0; 27.0; 31.0; 46.0; 54.0; 74.0; 77.0; 94.0; 107.0; 112.0; 114.0; 118.0; 122.0; 123.0; 124.0; 138.0; 157.0; 158.0; 160.0; 163.0; 194.0; 195.0; 197.0; 210.0; 224.0; 232.0; 243.0; 254.0; 269.0; 285.0; 288.0; 307.0; 333.0; 355.0; 379.0; 380.0; 382.0; 393.0; 419.0; 425.0; 429.0; 448.0; 464.0; 467.0; Total = 44

Variants different from Parent[1]: 15:29,1.1[Ex-168$]; 16:8,1.2[Ex-169$]; Count = 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 088% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-166#; (2) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

77.0; 96.0; 123.0; 125.0; 126.0; 135.0; 136.0; 141.0; 152.0; 153.0; 159.0; 163.0; 170.0; 171.0; 173.0; 176.0; 195.0; 209.0; 219.0; 220.0; 229.0; 240.0; 257.0; 263.0; 265.0; 267.0; 269.0; 274.0; 276.0; 282.0; 289.0; 292.0; 296.0; 298.0; 302.0; 316.0; 318.0; 323.0; 326.0; 327.0; 328.0; 331.0; 338.0; 342.0; 345.0; 348.0; 349.0; 365.0; 367.0; 374.0; 377.0; 382.0; 395.0; 399.0; 407.0; 408.0; 412.0; 419.0; 421.0; 434.0; 440.0; 443.0; 458.0; 461.0; 465.0; Total = 65

Variants different from Parent[1]: 15:54,2.2[Ex-168$]; 15:54,4.2[Ex-168$]; Count = 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 0121% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-150; (2) Ex-166#; (3) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

4.0; 22.0; 25.0; 27.0; 32.0; 40.0; 68.0; 74.0; 82.0; 88.0; 92.0; 101.0; 108.0; 112.0; 117.0; 124.0; 126.0; 134.0; 143.0; 146.0; 169.0; 177.0; 184.0; 199.0; 206.0; 208.0; 210.0; 211.0; 219.0; 222.0; 233.0; 243.0; 250.0; 253.0; 289.0; 304.0; 307.0; 312.0; 313.0; 320.0; 321.0; 326.0; 327.0; 328.0; 342.0; 348.0; 354.0; 357.0; 362.0; 367.0; 371.0; 372.0; 376.0; 378.0; 389.0; 395.0; 397.0; 399.0; 402.0; 407.0; 414.0; 427.0; 433.0; 439.0; 441.0; 447.0; 448.0; 453.0; 456.0; 461.0; 467.0; 468.0; Total = 72

Variants different from Parent[1]: 15:54,1.2[Ex-166#]; 16:6,2.2[Ex-168$]; 16:8,1.1[Ex-166#]; Count = 3

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 0185% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-164;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

3.0; 5.0; 9.0; 15.0; 19.0; 22.0; 34.0; 40.0; 52.0; 92.0; 123.0; 126.0; 139.0; 150.0; 183.0; 184.0; 201.0; 208.0; 209.0; 243.0; 290.0; 291.0; 293.0; 296.0; 320.0; 326.0; 327.0; 342.0; 351.0; 371.0; 374.0; 378.0; 383.0; 398.0; 400.0; 402.0; 403.0; 421.0; 422.0; 437.0; 439.0; 444.0; 446.0; 453.0; 456.0; 464.0; 469.0; Total = 47

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 0199% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-165#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

16.0; 30.0; 31.0; 41.0; 64.0; 67.0; 75.0; 105.0; 108.0; 115.0; 148.0; 156.0; 204.0; 207.0; 210.0; 218.0; 227.0; 250.0; 255.0; 262.0; 266.0; 281.0; 309.0; 310.0; 343.0; 352.0; 376.0; 387.0; 403.0; 410.0; 424.0; 468.0; Total = 32

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 0201% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-164; (2) Ex-155#; (3) Ex-166#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

3.0; 5.0; 9.0; 15.0; 19.0; 22.0; 34.0; 40.0; 52.0; 92.0; 123.0; 126.0; 139.0; 150.0; 183.0; 184.0; 201.0; 208.0; 209.0; 243.0; 290.0; 291.0; 293.0; 296.0; 320.0; 326.0; 327.0; 342.0; 351.0; 371.0; 374.0; 378.0; 383.0; 398.0; 400.0; 402.0; 403.0; 421.0; 422.0; 437.0; 439.0; 444.0; 446.0; 453.0; 456.0; 464.0; 469.0; Total = 47

Variants different from Parent[1]: 12:9,3.2[Ex-155#]; 12:10,4.2[Ex-166#]; 12:11,1.2[Ex-166#]; 14:23,1.1[Ex-155#]; Count = 4

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 0222% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-165#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

16.0; 30.0; 31.0; 41.0; 64.0; 67.0; 75.0; 105.0; 108.0; 115.0; 148.0; 156.0; 204.0; 207.0; 210.0; 218.0; 227.0; 250.0; 255.0; 262.0; 266.0; 281.0; 309.0; 310.0; 343.0; 352.0; 376.0; 387.0; 403.0; 410.0; 424.0; 468.0; Total = 32

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 0243\*% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-150; (2) Ex-168$; (3) Ex-170$; (4) Ex-166#; (5) Ex-158;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

4.0; 22.0; 25.0; 27.0; 32.0; 40.0; 68.0; 74.0; 82.0; 88.0; 92.0; 101.0; 108.0; 112.0; 117.0; 124.0; 126.0; 134.0; 143.0; 146.0; 169.0; 177.0; 184.0; 199.0; 206.0; 208.0; 210.0; 211.0; 219.0; 222.0; 233.0; 243.0; 250.0; 253.0; 289.0; 304.0; 307.0; 312.0; 313.0; 320.0; 321.0; 326.0; 327.0; 328.0; 342.0; 348.0; 354.0; 357.0; 362.0; 367.0; 371.0; 372.0; 376.0; 378.0; 389.0; 395.0; 397.0; 399.0; 402.0; 407.0; 414.0; 427.0; 433.0; 439.0; 441.0; 447.0; 448.0; 453.0; 456.0; 461.0; 467.0; 468.0; Total = 72

Variants different from Parent[1]: 14:2,1.2[Ex-168$]; 14:16,2.3[Ex-170$]; 14:37,1.1[Ex-168$]; 15:47,1.1[Ex-168$]; 15:54,1.2[Ex-168$]; 16:6,2.2[Ex-168$]; 16:8,1.1[Ex-168$]; Count = 7

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 0243^c% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-150; (2) Ex-155#; (3) Ex-170$; (4) Ex-168$; (5) Ex-169$; (6) Ex-166#; (7) Ex-158;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

4.0; 22.0; 25.0; 27.0; 32.0; 40.0; 68.0; 74.0; 82.0; 88.0; 92.0; 101.0; 108.0; 112.0; 117.0; 124.0; 126.0; 134.0; 143.0; 146.0; 169.0; 177.0; 184.0; 199.0; 206.0; 208.0; 210.0; 211.0; 219.0; 222.0; 233.0; 243.0; 250.0; 253.0; 289.0; 304.0; 307.0; 312.0; 313.0; 320.0; 321.0; 326.0; 327.0; 328.0; 342.0; 348.0; 354.0; 357.0; 362.0; 367.0; 371.0; 372.0; 376.0; 378.0; 389.0; 395.0; 397.0; 399.0; 402.0; 407.0; 414.0; 427.0; 433.0; 439.0; 441.0; 447.0; 448.0; 453.0; 456.0; 461.0; 467.0; 468.0; Total = 72

Variants different from Parent[1]: 14:2,1.2[Ex-155#]; 14:16,2.3[Ex-170$]; 14:37,1.1[Ex-155#]; 15:47,1.1[Ex-168$]; 15:51,2.2[Ex-155#]; 15:51,3.1[Ex-155#]; 15:54,1.2[Ex-168$]; 16:6,2.2[Ex-168$]; 16:8,1.1[Ex-155#]; Count = 9

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 0270% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-158; (2) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

20.0; 30.0; 33.0; 39.0; 47.0; 49.0; 50.0; 65.0; 69.0; 75.0; 82.0; 86.0; 89.0; 101.0; 108.0; 115.0; 116.0; 125.0; 132.0; 142.0; 143.0; 166.0; 173.0; 175.0; 190.0; 202.0; 219.0; 229.0; 259.0; 266.0; 268.0; 285.0; 299.0; 321.0; 335.0; 336.0; 337.0; 349.0; 353.0; 364.0; 365.0; 376.0; 388.0; 410.0; 412.0; 415.0; 417.0; 431.0; 435.0; 452.0; 460.0; Total = 51

Variants different from Parent[1]: 15:12,1.2[Ex-168$]; Count = 1

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 0278% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-157;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

1.0; 16.0; 35.0; 39.0; 42.0; 71.0; 89.0; 94.0; 96.0; 113.0; 125.0; 126.0; 135.0; 147.0; 156.0; 174.0; 188.0; 210.0; 225.0; 227.0; 244.0; 245.0; 246.0; 250.0; 256.0; 275.0; 305.0; 312.0; 322.0; 329.0; 330.0; 334.0; 335.0; 338.0; 347.0; 359.0; 369.0; 373.0; 379.0; 396.0; 399.0; 420.0; 426.0; 429.0; 433.0; 438.0; 442.0; 443.0; 448.0; 461.0; 462.0; 468.0; Total = 52

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 0285% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-165#; (2) Ex-155#; (3) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

16.0; 30.0; 31.0; 41.0; 64.0; 67.0; 75.0; 105.0; 108.0; 115.0; 148.0; 156.0; 204.0; 207.0; 210.0; 218.0; 227.0; 250.0; 255.0; 262.0; 266.0; 281.0; 309.0; 310.0; 343.0; 352.0; 376.0; 387.0; 403.0; 410.0; 424.0; 468.0; Total = 32

Variants different from Parent[1]: 4:6,2.2[Ex-155#]; 12:26,2.1[Ex-155#]; Count = 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 0289% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-165#; (2) Ex-168$; (3) Ex-155#; (4) Ex-171$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

16.0; 30.0; 31.0; 41.0; 64.0; 67.0; 75.0; 105.0; 108.0; 115.0; 148.0; 156.0; 204.0; 207.0; 210.0; 218.0; 227.0; 250.0; 255.0; 262.0; 266.0; 281.0; 309.0; 310.0; 343.0; 352.0; 376.0; 387.0; 403.0; 410.0; 424.0; 468.0; Total = 32

Variants different from Parent[1]: 2:12,2.2[Ex-168$]; 2:15,1.2[Ex-168$]; 3:12,2.4[Ex-171$]; 3:13,2.2[Ex-168$]; 3:16,1.2[Ex-168$]; 3:17,1.2[Ex-168$]; 4:2,2.1[Ex-168$]; Count = 7

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 1 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-145;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

35.2; Total = 1

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 6 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-148; (2) Ex-169$; (3) Ex-168$; (4) Ex-153; (5) Ex-165#; (6) Ex-150; (7) Ex-154; (8) Ex-158; (9) Ex-161; (10) Ex-156;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

51.1; 79.1; 84.1; 89.1; 229.2; 266.2; 345.1; 348.2; 367.2; 382.1; Total = 10

Variants different from Parent[1]: 1:14,1.2[Ex-153]; 1:15,1.1[Ex-153]; 1:18,3.2[Ex-169$]; 2:2,1.2[Ex-165#]; 2:10,1.2[Ex-168$]; 2:13,1.1[Ex-168$]; 2:15,1.5[Ex-169$]; 3:5,4.1[Ex-153]; 3:13,2.1[Ex-153]; 3:17,1.2[Ex-168$]; 4:2,1.1[Ex-168$]; 4:2,2.2[Ex-153]; 5:1,1.1[Ex-168$]; 5:3,1.1[Ex-168$]; 5:11,2.2[Ex-169$]; 5:12,1.1[Ex-168$]; 5:13,2.2[Ex-168$]; 6:5,2.2[Ex-168$]; 6:5,3.2[Ex-168$]; 6:7,1.2[Ex-169$]; 6:10,2.1[Ex-168$]; 6:14,1.2[Ex-150]; 6:16,1.2[Ex-168$]; 6:20,2.1[Ex-168$]; 7:3,1.1[Ex-168$]; 7:5,2.1[Ex-168$]; 7:7,2.1[Ex-168$]; 7:7,3.1[Ex-168$]; 7:34,1.1[Ex-153]; 7:34,2.1[Ex-169$]; 7:38,3.2[Ex-168$]; 7:39,1.1[Ex-153]; 7:40,2.2[Ex-168$]; 8:4,1.1[Ex-168$]; 8:8,2.1[Ex-153]; 8:11,1.3[Ex-150]; 9:13,1.1[Ex-168$]; 9:18,1.1[Ex-168$]; 9:20,1.2[Ex-169$]; 9:23,1.1[Ex-168$]; 10:10,2.2[Ex-169$]; 10:13,4.1[Ex-168$]; 10:24,1.1[Ex-153]; 11:17,1.2[Ex-153]; 11:17,2.2[Ex-153]; 11:19,2.1[Ex-168$]; 11:24,1.1[Ex-168$]; 11:24,4.1[Ex-168$]; 11:29,1.1[Ex-153]; 11:29,2.1[Ex-153]; 12:3,2.1[Ex-168$]; 12:3,3.1[Ex-153]; 12:9,1.1[Ex-168$]; 12:10,2.2[Ex-150]; 12:10,3.2[Ex-150]; 12:10,5.1[Ex-168$]; 12:20,1.2[Ex-169$]; 12:24,2.1[Ex-153]; 13:10,1.1[Ex-153]; 13:11,1.1[Ex-153]; 14:2,1.1[Ex-153]; 14:10,1.1[Ex-153]; 14:16,1.1[Ex-153]; 14:18,3.1[Ex-153]; 14:25,1.1[Ex-153]; 14:31,1.2; 14:38,1.1[Ex-153]; 14:39,3.1[Ex-169$]; 15:6,1.1[Ex-153]; 15:10,2.2[Ex-153]; 15:14,2.2[Ex-169$]; 15:20,1.1[Ex-153]; 15:28,3.2[Ex-153]; 15:31,1.2[Ex-168$]; 15:47,1.1[Ex-168$]; 15:49,1.1[Ex-168$]; 15:52,1.2[Ex-168$]; 16:2,2.2[Ex-168$]; 16:6,2.2[Ex-168$]; 16:6,3.2[Ex-168$]; 16:7,1.1[Ex-168$]; 16:8,1.2[Ex-169$]; 16:10,1.2[Ex-168$]; 16:17,2.2[Ex-150]; Count = 84

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 33\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-153; (2) Ex-168$; (3) Ex-169$; (4) Ex-151; (5) Ex-155#; (6) Ex-157; (7) Ex-152; (8) Ex-166#; (9) Ex-158;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

33.1; 34.1; 49.1; 64.1; 69.1; 81.1; 95.1; 99.1; 106.1; 114.1; 115.1; 125.1; 128.1; 154.1; 187.1; 190.1; 195.1; 252.1; 266.1; 276.1; 281.1; 285.1; 293.1; 333.1; 401.1; 415.1; 422.1; 445.1; 455.1; 460.1; 464.1; 469.1; Total = 32

Variants different from Parent[1]: 1:1,2.1[Ex-168$]; 1:10,1.2[Ex-168$]; 1:14,1.3[Ex-169$]; 2:10,2.2[Ex-168$]; 2:11,1.2[Ex-168$]; 2:13,2.2[Ex-168$]; 3:3,2.2[Ex-169$]; 3:5,4.2[Ex-168$]; 3:12,2.1[Ex-168$]; 3:17,1.2[Ex-168$]; 3:20,1.2[Ex-168$]; 4:6,2.2[Ex-151]; 5:4,1.3[Ex-169$]; 5:5,1.4[Ex-168$]; 6:1,1.2[Ex-168$]; 6:19,1.2[Ex-168$]; 7:17,2.1[Ex-168$]; 7:31,1.2[Ex-168$]; 7:34,3.2[Ex-168$]; 7:40,3.2[Ex-168$]; 8:6,1.2[Ex-168$]; 9:13,1.2[Ex-169$]; 9:22,1.2[Ex-151]; 9:22,2.2[Ex-166#]; 10:4,2.2[Ex-168$]; 11:2,1.2[Ex-151]; 11:20,1.2; 11:25,1.2[Ex-168$]; 12:9,1.2[Ex-169$]; 12:10,5.2[Ex-169$]; 12:19,1.2[Ex-168$]; 12:21,1.2[Ex-157]; 12:26,2.1[Ex-168$]; 13:4,1.2[Ex-166#]; 13:11,1.2[Ex-151]; 13:12,1.3; 14:2,1.2[Ex-168$]; 14:6,1.1[Ex-151]; 14:15,2.2[Ex-168$]; 14:25,3.1[Ex-168$]; 14:31,1.4[Ex-168$]; 15:6,1.2[Ex-168$]; 15:10,2.1[Ex-168$]; 15:24,1.2[Ex-151]; 15:25,1.2[Ex-168$]; 15:27,1.2[Ex-166#]; 16:15,2.2; Count = 47

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 42 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-145;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

35.2; Total = 1

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 69 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-149; (2) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

81.2; Total = 1

Variants different from Parent[1]: 15:29,1.3; 16:19,2.2[Ex-168$]; Count = 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 81\*% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-161; (2) Ex-168$; (3) Ex-169$; (4) Ex-164; (5) Ex-163; (6) Ex-152; (7) Ex-166#; (8) Ex-155#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

2.0; 84.2; 88.0; 128.0; 146.0; 154.2; 248.0; 254.0; 264.2; 354.0; 372.0; 397.0; 401.2; 407.0; 414.2; 440.0; Total = 16

Variants different from Parent[1]: 1:1,1.2[Ex-168$]; 1:6,1.2[Ex-168$]; 1:14,1.3[Ex-169$]; 2:2,1.1[Ex-168$]; 2:15,1.5[Ex-169$]; 2:16,1.2[Ex-168$]; 3:10,1.2[Ex-168$]; 3:17,1.2[Ex-168$]; 5:4,1.3[Ex-169$]; 5:10,3.2[Ex-169$]; 5:11,2.1[Ex-168$]; 6:11,1.3[Ex-163]; 6:15,2.1[Ex-168$]; 6:15,3.2[Ex-168$]; 6:19,1.2[Ex-168$]; 7:13,3.2[Ex-168$]; 7:31,1.2[Ex-168$]; 8:8,3.1[Ex-168$]; 8:11,1.3[Ex-152]; 9:7,2.2[Ex-163]; 9:12,1.2[Ex-169$]; 10:5,1.2; 10:8,2.2[Ex-168$]; 10:9,1.3[Ex-169$]; 10:9,2.2[Ex-168$]; 10:11,1.2[Ex-168$]; 10:19,2.1[Ex-168$]; 11:17,1.4[Ex-169$]; 11:17,2.4[Ex-169$]; 12:6,1.2[Ex-168$]; 13:3,1.2[Ex-163]; 13:8,3.1[Ex-168$]; 13:12,1.2[Ex-168$]; 14:11,1.2[Ex-168$]; 14:16,2.1[Ex-168$]; 14:18,2.1[Ex-168$]; 14:34,7.2[Ex-168$]; 14:37,1.2[Ex-169$]; 15:14,2.2[Ex-169$]; 15:54,3.4[Ex-169$]; 16:2,2.2[Ex-168$]; 16:8,1.2[Ex-169$]; 16:24,1.1[Ex-168$]; Count = 43

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 104\*% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-161; (2) Ex-169$; (3) Ex-168$; (4) Ex-166#; (5) Ex-155#; (6) Ex-152;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

2.0; 84.1; 88.0; 128.0; 146.0; 154.1; 248.0; 254.0; 264.1; 354.0; 372.0; 397.0; 401.1; 407.0; 414.1; 440.0; Total = 16

Variants different from Parent[1]: 1:11,1.2[Ex-169$]; 1:15,1.3; 4:16,1.2[Ex-168$]; 5:5,1.4[Ex-168$]; 5:11,1.2[Ex-169$]; 6:1,1.2[Ex-168$]; 6:2,2.1[Ex-168$]; 6:5,2.2[Ex-168$]; 6:11,1.3[Ex-166#]; 6:15,2.1[Ex-168$]; 6:15,3.2[Ex-168$]; 6:19,1.2[Ex-168$]; 7:29,1.2[Ex-168$]; 7:34,2.1[Ex-169$]; 7:40,2.2[Ex-168$]; 8:11,1.3[Ex-166#]; 9:7,2.2[Ex-166#]; 9:10,1.2[Ex-169$]; 9:16,2.3[Ex-168$]; 10:9,2.2[Ex-168$]; 10:19,2.1[Ex-168$]; 10:20,2.2[Ex-168$]; 12:21,1.2[Ex-166#]; 13:3,1.2[Ex-166#]; 13:4,1.2[Ex-166#]; 13:8,3.1[Ex-168$]; 14:18,2.1[Ex-168$]; 15:25,1.2[Ex-168$]; 16:2,2.2[Ex-168$]; 16:15,1.2[Ex-166#]; Count = 30

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 131\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-145;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

35.2; Total = 1

Variants different from Parent[1]: 2:4,1.4; Count = 1

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 309 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-149;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

81.2; Total = 1

Variants different from Parent[1]: 7:24,1.2; Count = 1

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 323\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-149; (2) Ex-164; (3) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

81.2; Total = 1

Variants different from Parent[1]: 1:17,1.2[Ex-164]; 1:22,1.2[Ex-168$]; 7:17,1.2[Ex-168$]; 16:22,1.2[Ex-168$]; Count = 4

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 326 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-149; (2) Ex-168$; (3) Ex-157; (4) Ex-161; (5) Ex-169$; (6) Ex-165#; (7) Ex-144; (8) Ex-158; (9) Ex-153;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

81.2; Total = 1

Variants different from Parent[1]: 1:13,1.2[Ex-168$]; 1:14,1.3[Ex-157]; 5:2,2.1[Ex-157]; 7:7,1.1[Ex-168$]; 7:15,1.1[Ex-168$]; 8:2,2.3; 9:20,1.2[Ex-169$]; 10:9,1.2[Ex-168$]; 11:17,1.2[Ex-157]; 11:17,2.2[Ex-157]; 11:27,2.2[Ex-168$]; 12:21,1.2[Ex-157]; 12:31,1.1[Ex-168$]; 13:2,1.1[Ex-168$]; 14:18,1.2[Ex-168$]; 14:21,2.1[Ex-157]; 14:39,1.1[Ex-168$]; 15:14,1.1[Ex-168$]; 15:31,2.1[Ex-168$]; 15:45,1.2[Ex-168$]; 15:54,1.3[Ex-157]; 15:54,3.4[Ex-169$]; Count = 22

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 365% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-153; (2) Ex-168$; (3) Ex-164; (4) Ex-157; (5) Ex-158; (6) Ex-169$; (7) Ex-152; (8) Ex-155#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

33.0; 34.1; 49.0; 64.0; 69.0; 81.0; 95.0; 99.0; 106.0; 114.0; 115.1; 125.0; 128.1; 154.0; 187.0; 190.0; 195.0; 252.0; 266.1; 276.0; 281.0; 285.0; 293.1; 333.0; 401.0; 415.0; 422.0; 445.0; 455.0; 460.1; 464.0; 469.1; Total = 32

Variants different from Parent[1]: 1:17,2.2[Ex-168$]; 2:10,1.2[Ex-168$]; 5:4,2.1[Ex-164]; 5:5,1.4[Ex-168$]; 6:1,1.2[Ex-168$]; 6:2,1.1[Ex-168$]; 6:5,2.2[Ex-168$]; 6:19,1.2[Ex-168$]; 7:34,2.1[Ex-158]; 7:39,2.1[Ex-168$]; 8:2,2.1[Ex-164]; 8:3,2.1[Ex-168$]; 8:11,1.3[Ex-152]; 10:16,1.2[Ex-168$]; 11:5,1.1[Ex-168$]; 11:23,1.3[Ex-168$]; 11:25,1.2[Ex-168$]; 12:6,1.2[Ex-168$]; 12:13,1.1[Ex-168$]; 12:21,1.2[Ex-157]; 12:25,1.1[Ex-168$]; 14:16,2.1[Ex-168$]; 14:18,2.1[Ex-168$]; 14:28,1.2[Ex-168$]; 15:14,2.1[Ex-168$]; 15:31,1.2[Ex-168$]; 15:45,1.2[Ex-168$]; 15:50,2.1[Ex-168$]; 15:54,1.3[Ex-157]; 16:2,2.2[Ex-168$]; 16:15,1.3[Ex-169$]; 16:22,1.2[Ex-168$]; Count = 32

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 440 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-145;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

35.2; Total = 1

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 491 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-149;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

81.2; Total = 1

Variants different from Parent[1]: 1:4,1.3; Count = 1

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 614\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-149; (2) Ex-168$; (3) Ex-165#; (4) Ex-169$; (5) Ex-157; (6) Ex-161;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

81.2; Total = 1

Variants different from Parent[1]: 3:17,1.2[Ex-168$]; 4:16,1.2[Ex-168$]; 5:7,1.1[Ex-165#]; 5:11,2.2[Ex-165#]; 7:10,1.3[Ex-169$]; 7:17,1.2[Ex-168$]; 9:12,1.2[Ex-169$]; 9:16,2.3[Ex-168$]; 12:21,1.2[Ex-157]; 14:18,1.2[Ex-168$]; 15:5,1.2[Ex-168$]; 15:7,1.2[Ex-165#]; 15:31,1.2[Ex-168$]; 15:54,1.3[Ex-169$]; Count = 14

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 629 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-149; (2) Ex-168$; (3) Ex-153; (4) Ex-166#; (5) Ex-169$; (6) Ex-170$; (7) Ex-157; (8) Ex-164; (9) Ex-158; (10) Ex-165#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

81.2; Total = 1

Variants different from Parent[1]: 1:29,1.2[Ex-166#]; 3:4,1.2[Ex-168$]; 3:5,3.1[Ex-168$]; 4:16,1.2[Ex-168$]; 4:17,2.1[Ex-168$]; 5:4,2.2[Ex-168$]; 5:7,1.1[Ex-166#]; 5:13,1.2[Ex-168$]; 6:7,2.2[Ex-168$]; 6:11,1.3[Ex-153]; 6:19,2.2[Ex-168$]; 7:7,1.1[Ex-168$]; 7:14,1.2[Ex-166#]; 7:14,2.3[Ex-166#]; 7:17,3.3[Ex-169$]; 7:17,4.3[Ex-169$]; 7:34,1.4[Ex-168$]; 7:34,3.2[Ex-168$]; 7:38,2.2[Ex-168$]; 8:7,2.2[Ex-168$]; 9:1,1.1[Ex-168$]; 9:12,1.2[Ex-169$]; 10:4,2.1[Ex-153]; 10:17,1.2[Ex-166#]; 12:2,1.3[Ex-169$]; 12:3,2.3[Ex-166#]; 13:4,1.2[Ex-166#]; 14:5,1.1[Ex-168$]; 14:16,2.3[Ex-153]; 14:18,1.2[Ex-168$]; 15:25,1.2[Ex-168$]; 15:31,1.2[Ex-168$]; 15:54,1.3[Ex-169$]; 16:8,1.2[Ex-153]; 16:15,1.2[Ex-166#]; Count = 35

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 630% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-150; (2) Ex-168$; (3) Ex-155#; (4) Ex-148; (5) Ex-164; (6) Ex-169$; (7) Ex-158;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

4.0; 22.0; 25.0; 27.0; 32.0; 40.0; 68.0; 74.0; 82.0; 88.1; 92.0; 101.0; 108.1; 112.0; 117.0; 124.0; 126.0; 134.0; 143.0; 146.1; 169.0; 177.0; 184.0; 199.1; 206.1; 208.1; 210.0; 211.0; 219.0; 222.1; 233.0; 243.0; 250.1; 253.1; 289.0; 304.0; 307.0; 312.0; 313.0; 320.0; 321.0; 326.0; 327.0; 328.1; 342.0; 348.0; 354.1; 357.0; 362.0; 367.0; 371.0; 372.1; 376.0; 378.1; 389.0; 395.0; 397.1; 399.0; 402.0; 407.1; 414.0; 427.0; 433.0; 439.1; 441.0; 447.0; 448.0; 453.0; 456.0; 461.0; 467.0; 468.0; Total = 72

Variants different from Parent[1]: 1:20,1.1[Ex-164]; 1:30,1.1[Ex-155#]; 2:4,1.2[Ex-155#]; 3:20,1.2[Ex-168$]; 4:11,1.1[Ex-168$]; 5:11,1.1[Ex-168$]; 6:2,1.1[Ex-168$]; 6:10,2.1[Ex-168$]; 6:15,3.2[Ex-168$]; 7:38,3.1[Ex-155#]; 7:39,2.1[Ex-168$]; 8:2,2.1[Ex-155#]; 8:6,3.2[Ex-168$]; 9:20,1.1[Ex-168$]; 10:2,1.1[Ex-168$]; 11:5,1.1[Ex-168$]; 12:6,2.1[Ex-168$]; 12:13,1.1[Ex-168$]; 12:13,2.2[Ex-168$]; 12:25,1.1[Ex-168$]; 12:26,1.1[Ex-168$]; 13:3,1.2[Ex-148]; 15:14,2.1[Ex-168$]; 15:27,1.2[Ex-164]; 15:47,1.2[Ex-169$]; 15:49,1.1[Ex-168$]; 16:17,2.1[Ex-168$]; Count = 27

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 945 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-148; (2) Ex-169$; (3) Ex-158; (4) Ex-168$; (5) Ex-166#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

51.1; 79.1; 84.1; 89.1; 229.2; 266.2; 345.1; 348.2; 367.2; 382.1; Total = 10

Variants different from Parent[1]: 4:9,1.2[Ex-169$]; 4:17,2.2[Ex-169$]; 7:9,1.2[Ex-169$]; 9:16,2.1[Ex-158]; 12:31,1.2[Ex-166#]; 14:18,1.2[Ex-168$]; 14:21,2.2[Ex-168$]; Count = 7

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 1175\*% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-161; (2) Ex-168$; (3) Ex-164; (4) Ex-169$; (5) Ex-166#; (6) Ex-155#; (7) Ex-152;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

2.0; 84.1; 88.0; 128.0; 146.0; 154.1; 248.0; 254.0; 264.1; 354.0; 372.0; 397.0; 401.1; 407.0; 414.1; 440.0; Total = 16

Variants different from Parent[1]: 1:6,1.2[Ex-168$]; 2:10,1.2[Ex-168$]; 3:12,2.2[Ex-169$]; 3:16,1.2[Ex-168$]; 3:17,1.2[Ex-168$]; 5:11,2.1[Ex-168$]; 6:15,2.1[Ex-168$]; 6:15,3.2[Ex-168$]; 6:19,1.2[Ex-168$]; 7:34,2.1[Ex-169$]; 7:34,3.2[Ex-168$]; 8:11,2.2[Ex-168$]; 9:7,2.2[Ex-166#]; 9:12,1.2[Ex-169$]; 9:15,1.2[Ex-168$]; 9:16,2.3[Ex-168$]; 10:9,2.2[Ex-168$]; 10:13,3.2[Ex-168$]; 10:19,2.1[Ex-168$]; 11:15,1.3[Ex-166#]; 11:19,2.1[Ex-168$]; 11:25,1.2[Ex-168$]; 12:6,1.2[Ex-168$]; 12:6,2.3[Ex-155#]; 12:10,4.2[Ex-168$]; 12:11,1.2[Ex-168$]; 12:26,1.2[Ex-164]; 13:3,1.2[Ex-166#]; 13:4,1.2[Ex-166#]; 13:8,3.1[Ex-168$]; 13:12,1.2[Ex-168$]; 14:11,1.2[Ex-168$]; 14:12,1.2[Ex-168$]; 14:15,2.2[Ex-168$]; 14:16,2.1[Ex-168$]; 14:18,2.1[Ex-168$]; 15:28,1.2[Ex-168$]; 15:54,1.2[Ex-168$]; 15:54,3.4[Ex-169$]; 16:2,2.2[Ex-168$]; 16:15,1.2[Ex-166#]; Count = 41

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 1175^c% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-161; (2) Ex-168$; (3) Ex-164; (4) Ex-169$; (5) Ex-166#; (6) Ex-155#; (7) Ex-152;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

2.0; 84.1; 88.0; 128.0; 146.0; 154.1; 248.0; 254.0; 264.1; 354.0; 372.0; 397.0; 401.1; 407.0; 414.1; 440.0; Total = 16

Variants different from Parent[1]: 1:6,1.2[Ex-168$]; 2:10,1.2[Ex-168$]; 3:12,2.2[Ex-169$]; 3:16,1.2[Ex-168$]; 3:17,1.2[Ex-168$]; 5:11,2.1[Ex-168$]; 6:15,2.1[Ex-168$]; 6:15,3.2[Ex-168$]; 6:19,1.2[Ex-168$]; 7:34,2.1[Ex-169$]; 7:34,3.2[Ex-168$]; 8:11,2.2[Ex-168$]; 9:7,2.2[Ex-166#]; 9:12,1.2[Ex-169$]; 9:15,1.2[Ex-168$]; 9:16,2.3[Ex-168$]; 10:9,2.2[Ex-168$]; 10:13,3.2[Ex-168$]; 10:19,2.1[Ex-168$]; 11:15,1.3[Ex-166#]; 11:19,2.1[Ex-168$]; 11:25,1.2[Ex-168$]; 12:6,1.2[Ex-168$]; 12:6,2.3[Ex-155#]; 12:10,4.2[Ex-168$]; 12:11,1.2[Ex-168$]; 12:26,1.2[Ex-164]; 13:3,1.2[Ex-166#]; 13:4,1.2[Ex-166#]; 13:8,3.1[Ex-168$]; 13:12,1.2[Ex-168$]; 14:11,1.2[Ex-168$]; 14:12,1.2[Ex-168$]; 14:15,2.2[Ex-168$]; 14:16,2.1[Ex-168$]; 14:18,2.1[Ex-168$]; 15:28,1.2[Ex-168$]; 15:54,1.2[Ex-168$]; 15:54,3.4[Ex-169$]; 16:2,2.2[Ex-168$]; 16:15,1.2[Ex-166#]; Count = 41

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 1241\*% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-166#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

77.0; 96.0; 123.0; 125.0; 126.0; 135.0; 136.0; 141.0; 152.0; 153.0; 159.0; 163.0; 170.0; 171.0; 173.1; 176.0; 195.0; 209.0; 219.0; 220.0; 229.1; 240.0; 257.0; 263.0; 265.0; 267.0; 269.0; 274.0; 276.0; 282.0; 289.0; 292.0; 296.0; 298.0; 302.0; 316.0; 318.0; 323.0; 326.0; 327.0; 328.0; 331.0; 338.0; 342.0; 345.0; 348.0; 349.0; 365.0; 367.0; 374.0; 377.0; 382.0; 395.0; 399.0; 407.0; 408.0; 412.0; 419.0; 421.0; 434.0; 440.0; 443.0; 458.0; 461.0; 465.0; Total = 65

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 1505\*% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-161; (2) Ex-168$; (3) Ex-152; (4) Ex-169$; (5) Ex-166#; (6) Ex-155#; (7) Ex-164;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

2.0; 84.1; 88.0; 128.0; 146.0; 154.1; 248.0; 254.0; 264.1; 354.0; 372.0; 397.0; 401.1; 407.0; 414.1; 440.0; Total = 16

Variants different from Parent[1]: 1:30,1.2[Ex-168$]; 2:11,2.3; 3:10,1.2[Ex-168$]; 5:4,1.2[Ex-168$]; 5:4,2.2[Ex-168$]; 5:10,3.2[Ex-152]; 5:11,2.1[Ex-168$]; 6:7,1.2[Ex-169$]; 6:15,2.1[Ex-168$]; 6:19,1.2[Ex-168$]; 6:20,1.2[Ex-168$]; 7:10,1.2[Ex-168$]; 7:13,1.1[Ex-169$]; 7:22,1.3[Ex-169$]; 7:34,2.1[Ex-169$]; 7:34,3.2[Ex-168$]; 7:36,1.2[Ex-168$]; 7:37,1.2[Ex-152]; 7:39,2.2[Ex-152]; 8:2,2.2[Ex-168$]; 8:11,2.2[Ex-168$]; 9:7,2.2[Ex-166#]; 9:12,1.2[Ex-152]; 9:17,1.2; 10:19,2.1[Ex-168$]; 10:20,2.2[Ex-168$]; 11:15,1.3[Ex-166#]; 11:27,2.2[Ex-168$]; 12:6,2.3[Ex-152]; 12:13,2.2[Ex-168$]; 12:18,1.2[Ex-168$]; 13:3,1.4[Ex-169$]; 13:8,3.1[Ex-168$]; 14:5,1.3[Ex-169$]; 14:18,2.1[Ex-168$]; 15:27,1.2[Ex-166#]; 15:31,1.2[Ex-168$]; 16:15,1.3[Ex-169$]; 16:22,1.2[Ex-168$]; Count = 39

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 1506% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-153; (2) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

33.0; 34.0; 49.0; 64.0; 69.0; 81.0; 95.0; 99.0; 106.0; 114.0; 115.0; 125.0; 128.0; 154.0; 187.0; 190.0; 195.0; 252.0; 266.0; 276.0; 281.0; 285.0; 293.0; 333.0; 401.0; 415.0; 422.0; 445.0; 455.0; 460.0; 464.0; 469.0; Total = 32

Variants different from Parent[1]: 2:12,2.2[Ex-168$]; 2:14,1.2[Ex-168$]; 3:20,1.2[Ex-168$]; 4:15,2.2[Ex-168$]; Count = 4

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 1611 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-149; (2) Ex-163;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

81.2; Total = 1

Variants different from Parent[1]: 6:20,1.2[Ex-163]; Count = 1

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 1739\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-150; (2) Ex-168$; (3) Ex-155#; (4) Ex-166#; (5) Ex-169$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

4.2; 22.2; 25.2; 27.2; 32.2; 40.2; 68.2; 74.2; 82.2; 88.1; 92.2; 101.1; 108.1; 112.2; 117.2; 124.2; 126.2; 134.2; 143.2; 146.1; 169.1; 177.2; 184.2; 199.1; 206.1; 208.1; 210.1; 211.2; 219.2; 222.1; 233.2; 243.2; 250.1; 253.1; 289.1; 304.2; 307.2; 312.2; 313.2; 320.2; 321.2; 326.2; 327.2; 328.1; 342.2; 348.1; 354.1; 357.2; 362.1; 367.2; 371.2; 372.1; 376.2; 378.1; 389.1; 395.2; 397.1; 399.1; 402.2; 407.1; 414.2; 427.2; 433.1; 439.1; 441.2; 447.2; 448.2; 453.2; 456.2; 461.2; 467.1; 468.2; Total = 72

Variants different from Parent[1]: 1:20,1.1[Ex-169$]; 6:10,2.1[Ex-168$]; 6:20,2.1[Ex-168$]; 7:31,1.2[Ex-168$]; 10:23,1.2[Ex-155#]; 10:23,2.2[Ex-155#]; 10:28,1.1[Ex-168$]; 11:24,4.1[Ex-168$]; 11:27,1.1[Ex-168$]; 12:24,2.2[Ex-168$]; 13:3,1.1[Ex-155#]; 14:37,1.1[Ex-168$]; 15:47,1.1[Ex-168$]; 15:54,1.2[Ex-168$]; 15:54,3.1[Ex-166#]; Count = 15

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 1739^c \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-150; (2) Ex-168$; (3) Ex-155#; (4) Ex-158;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

4.2; 22.2; 25.2; 27.2; 32.2; 40.2; 68.2; 74.2; 82.2; 88.1; 92.2; 101.1; 108.1; 112.2; 117.2; 124.2; 126.2; 134.2; 143.2; 146.1; 169.1; 177.2; 184.2; 199.1; 206.1; 208.1; 210.1; 211.2; 219.2; 222.1; 233.2; 243.2; 250.1; 253.1; 289.1; 304.2; 307.2; 312.2; 313.2; 320.2; 321.2; 326.2; 327.2; 328.1; 342.2; 348.1; 354.1; 357.2; 362.1; 367.2; 371.2; 372.1; 376.2; 378.1; 389.1; 395.2; 397.1; 399.1; 402.2; 407.1; 414.2; 427.2; 433.1; 439.1; 441.2; 447.2; 448.2; 453.2; 456.2; 461.2; 467.1; 468.2; Total = 72

Variants different from Parent[1]: 6:15,3.2[Ex-168$]; 7:20,1.2[Ex-168$]; 11:26,1.2[Ex-168$]; 16:6,2.2[Ex-168$]; 16:24,1.2[Ex-155#]; Count = 5

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 1881\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-147; (2) Ex-157; (3) Ex-164; (4) Ex-169$; (5) Ex-148;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

16.1; 17.2; 30.2; 34.1; 40.1; 45.2; 49.2; 51.2; 58.2; 59.2; 61.2; 63.2; 65.1; 67.2; 68.1; 69.1; 84.2; 90.2; 94.1; 96.2; 100.2; 105.2; 108.2; 115.2; 118.2; 121.2; 126.1; 131.2; 147.2; 151.2; 153.2; 156.1; 157.1; 158.1; 160.2; 180.2; 203.2; 205.2; 207.2; 208.2; 211.1; 216.2; 218.2; 219.1; 222.2; 223.2; 225.2; 229.1; 231.2; 233.1; 234.2; 239.2; 246.2; 264.2; 266.2; 269.2; 290.1; 291.1; 309.2; 311.2; 320.1; 321.1; 322.2; 334.2; 342.1; 343.1; 347.2; 352.2; 356.2; 359.2; 376.1; 382.2; 384.2; 386.1; 394.2; 400.2; 412.1; 419.2; 422.1; 424.1; 426.2; 429.2; 435.1; 439.2; 440.1; 441.1; 445.1; 461.1; Total = 88

Variants different from Parent[1]: 6:1,1.2[Ex-157]; 7:13,3.2[Ex-164]; 8:8,1.2[Ex-169$]; 13:3,1.2[Ex-148]; Count = 4

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 1881^c \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-147; (2) Ex-168$; (3) Ex-152;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

16.1; 17.2; 30.2; 34.1; 40.1; 45.2; 49.2; 51.2; 58.2; 59.2; 61.2; 63.2; 65.1; 67.2; 68.1; 69.1; 84.2; 90.2; 94.1; 96.2; 100.2; 105.2; 108.2; 115.2; 118.2; 121.2; 126.1; 131.2; 147.2; 151.2; 153.2; 156.1; 157.1; 158.1; 160.2; 180.2; 203.2; 205.2; 207.2; 208.2; 211.1; 216.2; 218.2; 219.1; 222.2; 223.2; 225.2; 229.1; 231.2; 233.1; 234.2; 239.2; 246.2; 264.2; 266.2; 269.2; 290.1; 291.1; 309.2; 311.2; 320.1; 321.1; 322.2; 334.2; 342.1; 343.1; 347.2; 352.2; 356.2; 359.2; 376.1; 382.2; 384.2; 386.1; 394.2; 400.2; 412.1; 419.2; 422.1; 424.1; 426.2; 429.2; 435.1; 439.2; 440.1; 441.1; 445.1; 461.1; Total = 88

Variants different from Parent[1]: 4:11,1.1[Ex-168$]; 11:29,2.2[Ex-168$]; 16:19,4.2[Ex-152]; Count = 3

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 2138 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-149; (2) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

81.2; Total = 1

Variants different from Parent[1]: 12:9,2.2[Ex-168$]; Count = 1

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 2464\*% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-161; (2) Ex-168$; (3) Ex-166#; (4) Ex-164; (5) Ex-169$; (6) Ex-155#; (7) Ex-152;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

2.0; 84.1; 88.0; 128.0; 146.0; 154.1; 248.0; 254.0; 264.1; 354.0; 372.0; 397.0; 401.1; 407.0; 414.1; 440.0; Total = 16

Variants different from Parent[1]: 1:13,1.2[Ex-168$]; 2:12,2.2[Ex-168$]; 3:17,1.2[Ex-168$]; 5:11,2.1[Ex-168$]; 5:13,1.2[Ex-168$]; 6:11,1.3[Ex-166#]; 6:15,2.1[Ex-168$]; 6:19,1.2[Ex-168$]; 7:13,3.2[Ex-168$]; 7:40,2.2[Ex-168$]; 9:7,2.2[Ex-166#]; 10:9,2.2[Ex-168$]; 10:19,2.1[Ex-168$]; 11:19,3.2[Ex-168$]; 12:2,1.2[Ex-168$]; 12:13,1.2[Ex-169$]; 12:25,1.2[Ex-155#]; 13:4,1.2[Ex-166#]; 13:8,3.1[Ex-168$]; 13:12,1.2[Ex-168$]; 14:15,2.2[Ex-168$]; 14:18,2.1[Ex-168$]; 14:31,1.4[Ex-168$]; 15:54,3.4[Ex-169$]; 16:8,1.2[Ex-169$]; 16:15,1.2[Ex-166#]; Count = 26

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms 2495 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-145; (2) Ex-168$; (3) Ex-169$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

35.2; Total = 1

Variants different from Parent[1]: 6:15,3.2[Ex-168$]; 6:20,1.3[Ex-169$]; Count = 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms pm^a \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-146;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

3.1; Total = 1

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms pm^b \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-149; (2) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

81.2; Total = 1

Variants different from Parent[1]: 2:12,2.2[Ex-168$]; 6:15,3.2[Ex-168$]; 6:16,1.2[Ex-168$]; 6:19,1.2[Ex-168$]; Count = 4

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms TR \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-149; (2) Ex-168$; (3) Ex-157; (4) Ex-160; (5) Ex-158; (6) Ex-169$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

81.2; Total = 1

Variants different from Parent[1]: 1:29,1.2[Ex-169$]; 6:5,2.2[Ex-168$]; 7:34,3.2[Ex-168$]; 7:39,2.1[Ex-168$]; 11:15,1.1[Ex-168$]; 11:32,1.1[Ex-158]; 12:2,1.3[Ex-160]; 12:25,1.1[Ex-168$]; 14:5,1.1[Ex-168$]; 15:49,1.1[Ex-168$]; Count = 10

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms HF \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-149; (2) Ex-168$; (3) Ex-169$; (4) Ex-171$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

81.2; Total = 1

Variants different from Parent[1]: 5:7,1.1[Ex-169$]; 6:16,1.2[Ex-168$]; 7:34,1.1[Ex-171$]; Count = 3

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms RP \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-149; (2) Ex-168$; (3) Ex-169$; (4) Ex-171$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

81.2; Total = 1

Variants different from Parent[1]: 5:7,1.1[Ex-169$]; 5:11,1.1[Ex-168$]; 6:16,1.2[Ex-168$]; 7:34,1.1[Ex-171$]; Count = 4

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms NA-27 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-165#; (2) Ex-168$; (3) Ex-166#; (4) Ex-155#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

16.1; 30.1; 31.1; 41.1; 64.1; 67.1; 75.1; 105.1; 108.1; 115.1; 148.1; 156.1; 204.1; 207.1; 210.1; 218.1; 227.1; 250.1; 255.1; 262.1; 266.1; 281.1; 309.1; 310.1; 343.1; 352.1; 376.1; 387.1; 403.1; 410.1; 424.1; 468.1; Total = 32

Variants different from Parent[1]: 1:14,1.1[Ex-168$]; 2:2,1.1[Ex-168$]; 4:2,2.1[Ex-168$]; 4:14,1.1[Ex-168$]; 5:11,2.1[Ex-168$]; 6:2,2.1[Ex-168$]; 7:13,1.1[Ex-166#]; 7:15,1.1[Ex-168$]; 7:17,2.1[Ex-168$]; 7:34,2.1[Ex-166#]; 8:8,3.1[Ex-168$]; 9:9,2.1[Ex-168$]; 9:16,2.1[Ex-166#]; 10:9,1.1[Ex-166#]; 10:18,1.1[Ex-168$]; 10:19,2.1[Ex-168$]; 10:20,1.1[Ex-168$]; 11:17,1.1[Ex-168$]; 11:17,2.1[Ex-168$]; 11:19,2.1[Ex-168$]; 12:26,2.1[Ex-168$]; 14:16,2.1[Ex-168$]; 14:18,2.1[Ex-168$]; 14:39,1.1[Ex-168$]; 15:7,1.1[Ex-168$]; 15:14,1.1[Ex-168$]; 15:28,3.1[Ex-168$]; 15:49,1.1[Ex-168$]; 15:50,2.1[Ex-168$]; 15:51,2.1[Ex-168$]; 16:17,1.1[Ex-168$]; 16:24,1.1[Ex-168$]; Count = 32

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms vg\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-159;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

126.1; 163.1; 263.1; 274.1; 293.1; Total = 5

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms vg^a \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-159;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

126.1; 163.1; 263.1; 274.1; 293.1; Total = 5

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms vg^b \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-163; (2) Ex-169$; (3) Ex-168$; (4) Ex-155#; (5) Ex-165#; (6) Ex-161;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

33.0; 94.1; 133.0; 210.0; 344.0; Total = 5

Variants different from Parent[1]: 1:14,1.3[Ex-169$]; 1:22,1.2[Ex-168$]; 2:13,1.2[Ex-169$]; 3:4,2.2[Ex-168$]; 3:10,1.2[Ex-168$]; 3:12,1.1[Ex-165#]; 3:17,1.2[Ex-168$]; 3:20,1.2[Ex-168$]; 4:6,2.2[Ex-155#]; 5:1,1.2[Ex-155#]; 5:7,1.2[Ex-168$]; 5:10,1.2[Ex-155#]; 6:5,4.2[Ex-168$]; 6:20,2.2[Ex-169$]; 7:17,3.3[Ex-169$]; 7:17,4.3[Ex-169$]; 8:1,1.2[Ex-168$]; 8:7,1.1[Ex-165#]; 9:22,1.2[Ex-155#]; 10:8,1.2[Ex-155#]; 10:8,2.2[Ex-168$]; 10:19,2.2[Ex-169$]; 10:29,1.2[Ex-168$]; 11:10,1.2[Ex-168$]; 11:22,1.1[Ex-168$]; 11:34,1.2[Ex-168$]; 12:2,1.3[Ex-169$]; 12:3,2.2[Ex-169$]; 12:3,3.2[Ex-168$]; 12:20,1.2[Ex-169$]; 12:25,1.2[Ex-155#]; 13:8,3.2[Ex-169$]; 14:2,2.2[Ex-168$]; 14:6,1.2[Ex-168$]; 14:10,1.2[Ex-155#]; 14:12,1.2[Ex-168$]; 14:31,1.4[Ex-168$]; 14:32,1.2[Ex-168$]; 14:34,1.2[Ex-168$]; 14:37,1.1[Ex-168$]; 14:39,1.1[Ex-168$]; 14:40,1.2[Ex-168$]; 15:2,1.2[Ex-168$]; 15:14,2.2[Ex-169$]; 15:15,1.2[Ex-169$]; 15:25,1.2[Ex-168$]; 15:28,2.2[Ex-168$]; 15:50,2.3[Ex-169$]; 15:54,1.1[Ex-155#]; 16:6,1.2[Ex-168$]; 16:7,1.2[Ex-169$]; Count = 51

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms vg^cl \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-159; (2) Ex-155#; (3) Ex-168$; (4) Ex-157; (5) Ex-151;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

126.1; 163.1; 263.1; 274.1; 293.1; Total = 5

Variants different from Parent[1]: 4:9,1.2[Ex-155#]; 4:16,1.2[Ex-168$]; 7:34,3.2[Ex-168$]; 7:39,1.2[Ex-155#]; 10:23,1.2[Ex-155#]; 10:23,2.2[Ex-155#]; 11:27,1.2[Ex-151]; 12:13,1.2[Ex-151]; 12:21,1.1[Ex-155#]; 14:4,1.2[Ex-168$]; 14:18,1.2[Ex-168$]; 16:12,1.2[Ex-168$]; 16:19,5.2[Ex-168$]; Count = 13

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms vg^st \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-159; (2) Ex-151; (3) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

126.1; 163.1; 263.1; 274.1; 293.1; Total = 5

Variants different from Parent[1]: 1:29,1.1[Ex-151]; 5:4,2.2[Ex-168$]; 6:20,1.1[Ex-151]; 7:36,1.2[Ex-168$]; 12:27,1.1[Ex-151]; Count = 5

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms it-ar \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-156; (2) Ex-157; (3) Ex-168$; (4) Ex-153; (5) Ex-155#; (6) Ex-158; (7) Ex-170$; (8) Ex-151; (9) Ex-152; (10) Ex-154; (11) Ex-161; (12) Ex-169$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

43.1; 66.1; 213.1; 214.1; 217.1; 315.1; 337.1; 380.0; 390.1; 392.1; 393.1; 399.1; 404.1; 405.1; 416.1; Total = 15

Variants different from Parent[1]: 1:14,1.3[Ex-157]; 1:18,2.1[Ex-157]; 3:20,1.2[Ex-168$]; 4:16,1.2[Ex-168$]; 5:3,1.1[Ex-157]; 5:4,1.4[Ex-170$]; 5:5,1.4[Ex-157]; 5:7,1.2[Ex-168$]; 6:15,1.2[Ex-168$]; 7:20,1.2[Ex-168$]; 7:21,1.2[Ex-168$]; 7:34,3.2[Ex-157]; 7:37,1.1[Ex-157]; 7:39,1.2[Ex-155#]; 7:40,4.1[Ex-157]; 8:1,1.2[Ex-168$]; 9:13,1.1[Ex-168$]; 9:16,2.1[Ex-158]; 10:16,2.1[Ex-157]; 11:2,2.1[Ex-157]; 11:15,1.3[Ex-170$]; 11:26,1.2[Ex-168$]; 11:27,1.2[Ex-151]; 12:3,1.2[Ex-168$]; 12:3,2.2[Ex-151]; 12:25,1.2[Ex-153]; 13:8,3.2[Ex-157]; 13:12,1.4[Ex-169$]; 14:10,1.2[Ex-155#]; 14:12,1.2[Ex-168$]; 15:14,2.2[Ex-153]; 15:25,1.2[Ex-157]; 15:34,1.2[Ex-157]; 15:37,1.1[Ex-157]; 15:50,2.3[Ex-169$]; 16:6,3.3[Ex-169$]; 16:12,1.2[Ex-168$]; 16:15,1.3[Ex-169$]; Count = 38

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms it-b\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-156; (2) Ex-155#; (3) Ex-164; (4) Ex-168$; (5) Ex-157; (6) Ex-165#; (7) Ex-169$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

43.2; 66.2; 213.2; 214.2; 217.2; 315.2; 337.2; 380.0; 390.2; 392.2; 393.2; 399.2; 404.2; 405.2; 416.2; Total = 15

Variants different from Parent[1]: 1:1,2.2[Ex-155#]; 1:2,1.2[Ex-164]; 2:1,1.2[Ex-155#]; 3:10,1.2[Ex-168$]; 4:17,2.2[Ex-157]; 7:5,3.1[Ex-155#]; 8:6,1.2[Ex-164]; 9:9,1.2[Ex-168$]; 9:15,1.1[Ex-164]; 10:28,1.1[Ex-155#]; 11:17,1.4[Ex-169$]; 11:17,2.4[Ex-169$]; 11:20,1.3[Ex-168$]; 11:34,1.2[Ex-155#]; 12:10,1.2[Ex-168$]; 12:12,1.2[Ex-155#]; 13:11,1.2[Ex-155#]; 14:2,2.2[Ex-168$]; 14:14,1.2[Ex-164]; 15:3,1.2[Ex-168$]; 15:10,1.3[Ex-169$]; 15:28,1.2[Ex-164]; 15:31,2.2[Ex-169$]; 15:31,3.2[Ex-168$]; 15:50,1.2[Ex-168$]; 15:51,2.1[Ex-164]; Count = 26

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms it-d \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-160; (2) Ex-165#; (3) Ex-169$; (4) Ex-168$; (5) Ex-170$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

12.1; 17.1; 18.1; 23.1; 30.1; 31.1; 93.1; 173.1; 180.1; 192.1; 225.1; 229.1; 279.1; 283.1; 289.1; 290.1; 291.1; 314.1; 319.1; 364.1; 430.1; Total = 21

Variants different from Parent[1]: 5:10,2.1[Ex-165#]; 5:13,1.2[Ex-168$]; 6:20,1.3[Ex-169$]; 7:36,1.2[Ex-168$]; 11:23,1.3[Ex-168$]; 14:19,1.3[Ex-168$]; Count = 6

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms it-e% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-166#; (2) Ex-165#; (3) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

77.0; 96.1; 123.0; 125.1; 126.0; 135.0; 136.0; 141.0; 152.0; 153.1; 159.0; 163.0; 170.1; 171.0; 173.1; 176.0; 195.0; 209.0; 219.0; 220.1; 229.1; 240.0; 257.0; 263.0; 265.0; 267.0; 269.0; 274.0; 276.0; 282.0; 289.1; 292.0; 296.0; 298.0; 302.0; 316.1; 318.1; 323.0; 326.0; 327.0; 328.0; 331.0; 338.0; 342.0; 345.0; 348.0; 349.0; 365.0; 367.0; 374.0; 377.1; 382.0; 395.0; 399.0; 407.1; 408.0; 412.0; 419.0; 421.0; 434.0; 440.0; 443.0; 458.0; 461.0; 465.0; Total = 65

Variants different from Parent[1]: 1:29,1.1[Ex-165#]; 10:17,1.1[Ex-165#]; 10:27,1.1[Ex-165#]; Count = 3

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms it-f\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-162; (2) Ex-168$; (3) Ex-165#; (4) Ex-169$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

24.1; 50.1; 54.1; 215.1; 223.1; 466.1; Total = 6

Variants different from Parent[1]: 3:10,1.2[Ex-168$]; 5:11,2.2[Ex-165#]; 6:5,4.2[Ex-168$]; 7:34,1.4[Ex-168$]; 7:34,2.2; 9:8,1.2[Ex-168$]; 12:13,1.2[Ex-169$]; Count = 7

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms it-g% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-165#; (2) Ex-168$; (3) Ex-169$; (4) Ex-166#; (5) Ex-155#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

16.1; 30.1; 31.1; 41.1; 64.1; 67.1; 75.1; 105.1; 108.1; 115.1; 148.1; 156.1; 204.1; 207.1; 210.1; 218.1; 227.1; 250.1; 255.1; 262.1; 266.1; 281.1; 309.1; 310.1; 343.1; 352.1; 376.0; 387.1; 403.1; 410.1; 424.1; 468.1; Total = 32

Variants different from Parent[1]: 1:15,1.2[Ex-168$]; 1:18,3.2[Ex-169$]; 2:16,1.2[Ex-168$]; 4:15,1.2[Ex-168$]; 6:2,2.1[Ex-168$]; 6:5,4.2[Ex-168$]; 6:14,1.2[Ex-166#]; 9:7,1.2[Ex-168$]; 10:17,1.2[Ex-166#]; 10:19,2.1[Ex-168$]; 10:27,1.2[Ex-166#]; 11:29,2.2[Ex-168$]; 12:31,1.2[Ex-166#]; 14:10,1.2[Ex-155#]; 14:18,2.1[Ex-168$]; 16:19,4.2[Ex-166#]; 16:19,5.2[Ex-168$]; 16:23,1.2[Ex-168$]; Count = 18

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms it-r% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-162; (2) Ex-152; (3) Ex-169$; (4) Ex-165#; (5) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

24.1; 50.1; 54.1; 215.1; 223.1; 466.1; Total = 6

Variants different from Parent[1]: 1:15,1.2[Ex-152]; 1:18,2.2[Ex-169$]; 1:29,1.1[Ex-165#]; 3:3,2.1[Ex-152]; 6:16,1.2[Ex-168$]; 7:1,1.1[Ex-165#]; 7:5,1.2[Ex-168$]; 7:5,3.1[Ex-165#]; 7:22,1.1[Ex-152]; 14:12,1.2[Ex-168$]; 15:15,1.2[Ex-169$]; 15:25,1.2[Ex-168$]; 15:27,1.1[Ex-152]; 16:15,1.1[Ex-152]; 16:19,4.1[Ex-165#]; Count = 15

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms it-t% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-155#; (2) Ex-169$; (3) Ex-166#; (4) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

2.0; 4.0; 25.0; 33.0; 35.0; 49.0; 56.0; 58.0; 59.0; 63.0; 78.0; 79.0; 82.0; 90.0; 96.0; 99.0; 100.0; 104.0; 140.0; 143.0; 144.0; 145.0; 151.0; 153.0; 169.0; 177.0; 180.0; 182.0; 185.0; 186.0; 200.0; 223.0; 224.0; 226.0; 231.0; 237.0; 238.0; 239.0; 248.0; 260.0; 271.0; 272.0; 290.0; 291.0; 304.0; 306.0; 311.0; 313.0; 321.0; 322.0; 324.0; 329.0; 332.0; 340.0; 341.0; 347.0; 356.0; 359.0; 366.0; 370.0; 400.0; 409.0; 433.0; 445.0; 447.0; 448.0; Total = 66

Variants different from Parent[1]: 1:18,3.2[Ex-169$]; 6:14,1.2[Ex-166#]; 7:7,1.1[Ex-166#]; 7:34,2.1[Ex-169$]; 7:34,3.2[Ex-168$]; 7:40,2.2[Ex-168$]; 9:12,1.1[Ex-166#]; 10:17,1.2[Ex-166#]; 10:27,1.2[Ex-166#]; 11:24,1.2[Ex-169$]; 12:27,1.2[Ex-168$]; 12:31,1.2[Ex-166#]; 15:2,1.2[Ex-168$]; Count = 13

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms sa^a% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-165#; (2) Ex-168$; (3) Ex-155#; (4) Ex-169$; (5) Ex-166#; (6) Ex-170$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

16.0; 30.1; 31.1; 41.1; 64.1; 67.1; 75.0; 105.1; 108.0; 115.0; 148.0; 156.0; 204.1; 207.1; 210.1; 218.1; 227.1; 250.0; 255.1; 262.1; 266.0; 281.1; 309.1; 310.1; 343.0; 352.1; 376.1; 387.1; 403.1; 410.0; 424.0; 468.1; Total = 32

Variants different from Parent[1]: 1:13,1.2[Ex-168$]; 2:1,1.2[Ex-168$]; 4:2,2.1[Ex-168$]; 4:17,2.2[Ex-169$]; 5:4,1.3[Ex-169$]; 5:5,1.4[Ex-168$]; 5:7,2.2[Ex-155#]; 5:10,2.2[Ex-155#]; 5:11,2.1[Ex-168$]; 6:2,2.1[Ex-168$]; 6:11,1.2[Ex-169$]; 7:1,1.2[Ex-166#]; 7:13,1.1[Ex-155#]; 7:31,1.2[Ex-168$]; 7:34,2.1[Ex-169$]; 8:6,1.2[Ex-168$]; 8:8,3.1[Ex-168$]; 8:11,1.4[Ex-169$]; 9:7,2.2[Ex-166#]; 9:22,1.2[Ex-155#]; 10:9,1.1[Ex-155#]; 10:19,2.1[Ex-168$]; 10:27,1.2[Ex-166#]; 11:14,1.2[Ex-169$]; 11:19,2.1[Ex-168$]; 11:24,4.4[Ex-169$]; 12:10,4.2[Ex-168$]; 13:4,1.2[Ex-166#]; 14:11,1.2[Ex-168$]; 14:12,1.2[Ex-168$]; 14:14,1.2[Ex-168$]; 14:18,1.2[Ex-168$]; 14:18,2.1[Ex-168$]; 14:21,2.2[Ex-168$]; 14:37,1.4[Ex-166#]; 15:28,1.2[Ex-168$]; 15:49,1.1[Ex-168$]; 15:50,2.1[Ex-168$]; 16:10,1.2[Ex-168$]; 16:19,3.2[Ex-168$]; 16:24,1.1[Ex-168$]; Count = 41

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms sa^b% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-165#; (2) Ex-168$; (3) Ex-169$; (4) Ex-166#; (5) Ex-155#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

16.0; 30.1; 31.1; 41.1; 64.1; 67.1; 75.0; 105.1; 108.0; 115.0; 148.0; 156.0; 204.1; 207.1; 210.1; 218.1; 227.1; 250.0; 255.1; 262.1; 266.0; 281.1; 309.1; 310.1; 343.0; 352.1; 376.1; 387.1; 403.1; 410.0; 424.0; 468.1; Total = 32

Variants different from Parent[1]: 1:6,1.2[Ex-168$]; 2:10,2.2[Ex-168$]; 4:2,2.1[Ex-168$]; 5:4,1.3[Ex-169$]; 5:5,1.4[Ex-168$]; 5:10,2.2[Ex-169$]; 5:11,2.1[Ex-168$]; 6:2,2.1[Ex-168$]; 7:1,1.2[Ex-166#]; 7:34,2.1[Ex-169$]; 8:8,3.1[Ex-168$]; 9:22,1.2[Ex-155#]; 10:9,1.1[Ex-166#]; 10:19,2.1[Ex-168$]; 11:24,4.4[Ex-169$]; 13:8,3.2[Ex-169$]; 14:11,1.2[Ex-168$]; 14:12,1.2[Ex-168$]; 14:18,2.1[Ex-168$]; 14:21,2.2[Ex-168$]; 15:14,2.2[Ex-169$]; 15:54,1.2[Ex-168$]; 16:19,3.2[Ex-168$]; Count = 23

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms bo^a% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-165#; (2) Ex-168$; (3) Ex-169$; (4) Ex-166#; (5) Ex-155#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

16.0; 30.1; 31.1; 41.1; 64.1; 67.1; 75.0; 105.1; 108.0; 115.0; 148.0; 156.0; 204.1; 207.1; 210.1; 218.1; 227.1; 250.0; 255.1; 262.1; 266.0; 281.1; 309.1; 310.1; 343.0; 352.1; 376.1; 387.1; 403.1; 410.0; 424.0; 468.1; Total = 32

Variants different from Parent[1]: 2:12,1.2[Ex-168$]; 3:12,1.2[Ex-168$]; 4:2,2.1[Ex-168$]; 5:4,1.3[Ex-169$]; 5:5,1.4[Ex-168$]; 5:10,2.2[Ex-169$]; 5:11,2.1[Ex-168$]; 6:2,2.1[Ex-168$]; 6:11,1.3[Ex-166#]; 6:19,1.2[Ex-168$]; 7:1,1.2[Ex-166#]; 7:15,1.1[Ex-168$]; 7:34,2.1[Ex-169$]; 7:39,1.3[Ex-168$]; 8:8,3.1[Ex-168$]; 9:7,1.2[Ex-168$]; 9:22,1.2[Ex-155#]; 10:9,1.1[Ex-166#]; 10:10,1.2[Ex-169$]; 10:19,2.1[Ex-168$]; 10:28,1.2[Ex-166#]; 11:24,4.4[Ex-169$]; 11:26,1.2[Ex-168$]; 11:27,1.2[Ex-169$]; 14:7,1.2[Ex-169$]; 14:11,1.2[Ex-168$]; 14:12,1.2[Ex-168$]; 14:21,2.2[Ex-168$]; 15:50,2.3[Ex-169$]; 15:54,1.2[Ex-168$]; 16:2,1.2[Ex-155#]; 16:15,1.2[Ex-166#]; 16:19,3.2[Ex-168$]; 16:23,1.2[Ex-168$]; Count = 34

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms bo^b% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-165#; (2) Ex-168$; (3) Ex-169$; (4) Ex-166#; (5) Ex-155#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

16.0; 30.1; 31.1; 41.1; 64.1; 67.1; 75.0; 105.1; 108.0; 115.0; 148.0; 156.0; 204.1; 207.1; 210.1; 218.1; 227.1; 250.0; 255.1; 262.1; 266.0; 281.1; 309.1; 310.1; 343.0; 352.1; 376.1; 387.1; 403.1; 410.0; 424.0; 468.1; Total = 32

Variants different from Parent[1]: 1:14,1.1[Ex-168$]; 2:12,1.2[Ex-168$]; 3:20,1.2[Ex-168$]; 4:2,2.1[Ex-168$]; 5:4,1.3[Ex-169$]; 5:5,1.4[Ex-168$]; 5:10,2.2[Ex-169$]; 5:11,2.1[Ex-168$]; 6:2,2.1[Ex-168$]; 6:5,4.2[Ex-168$]; 6:11,1.3[Ex-166#]; 7:1,1.2[Ex-166#]; 7:15,1.1[Ex-168$]; 7:34,2.1[Ex-169$]; 7:39,1.3[Ex-168$]; 8:8,3.1[Ex-168$]; 9:7,1.2[Ex-168$]; 9:22,1.2[Ex-155#]; 10:9,1.1[Ex-166#]; 10:10,1.2[Ex-169$]; 10:19,2.1[Ex-168$]; 10:28,1.2[Ex-166#]; 11:10,1.2[Ex-168$]; 11:19,2.1[Ex-168$]; 11:24,4.4[Ex-169$]; 11:26,1.2[Ex-168$]; 11:27,1.2[Ex-169$]; 12:31,1.2[Ex-166#]; 13:4,1.2[Ex-166#]; 13:8,3.2[Ex-169$]; 14:7,1.2[Ex-169$]; 14:11,1.2[Ex-168$]; 14:12,1.2[Ex-168$]; 14:21,2.2[Ex-168$]; 15:29,1.2[Ex-169$]; 15:50,2.3[Ex-169$]; 15:54,1.2[Ex-168$]; 16:2,1.2[Ex-155#]; 16:15,1.2[Ex-166#]; 16:15,2.3[Ex-168$]; 16:19,3.2[Ex-168$]; 16:23,1.2[Ex-168$]; 16:24,1.1[Ex-168$]; Count = 43

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms sy^h% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-151; (2) Ex-168$; (3) Ex-158; (4) Ex-166#; (5) Ex-164; (6) Ex-163; (7) Ex-169$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

3.2; 27.2; 31.1; 46.2; 54.2; 74.2; 77.2; 94.0; 107.2; 112.0; 114.2; 118.0; 122.2; 123.2; 124.2; 138.2; 157.2; 158.2; 160.0; 163.2; 194.2; 195.2; 197.0; 210.2; 224.1; 232.2; 243.2; 254.0; 269.2; 285.2; 288.2; 307.2; 333.2; 355.2; 379.2; 380.0; 382.2; 393.2; 419.2; 425.2; 429.2; 448.1; 464.2; 467.0; Total = 44

Variants different from Parent[1]: 1:29,1.2[Ex-166#]; 4:2,1.1[Ex-168$]; 4:6,1.1[Ex-158]; 4:17,2.1[Ex-168$]; 5:4,2.2[Ex-168$]; 5:10,3.1[Ex-168$]; 5:11,1.1[Ex-168$]; 6:2,1.1[Ex-168$]; 6:10,2.1[Ex-168$]; 6:16,1.2[Ex-168$]; 6:19,1.2[Ex-168$]; 7:2,1.2[Ex-166#]; 7:34,1.1[Ex-158]; 7:40,2.2[Ex-168$]; 8:2,2.1[Ex-158]; 8:11,2.2[Ex-168$]; 9:7,2.2[Ex-158]; 9:10,1.1[Ex-168$]; 9:20,2.1[Ex-158]; 9:21,1.1[Ex-158]; 9:21,2.1[Ex-158]; 10:8,2.2[Ex-168$]; 11:5,1.1[Ex-168$]; 11:14,1.1[Ex-168$]; 11:15,1.3[Ex-166#]; 11:27,1.1[Ex-168$]; 11:27,2.2[Ex-168$]; 12:12,1.1[Ex-168$]; 12:13,1.1[Ex-168$]; 12:13,2.2[Ex-168$]; 12:25,1.1[Ex-168$]; 12:26,1.2[Ex-158]; 12:27,1.2[Ex-168$]; 13:3,1.4[Ex-169$]; 14:39,3.3[Ex-168$]; 15:6,1.1[Ex-158]; 15:29,1.1[Ex-168$]; 15:31,2.1[Ex-168$]; 15:50,2.1[Ex-168$]; 16:22,1.2[Ex-168$]; Count = 40

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms sy^p% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-146; (2) Ex-168$; (3) Ex-157; (4) Ex-158; (5) Ex-166#; (6) Ex-160; (7) Ex-154; (8) Ex-156; (9) Ex-164;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

3.1; Total = 1

Variants different from Parent[1]: 1:13,1.2[Ex-168$]; 1:13,2.2[Ex-168$]; 1:14,1.3[Ex-157]; 1:17,3.2[Ex-168$]; 1:22,1.2[Ex-168$]; 1:29,1.2[Ex-166#]; 2:1,1.1[Ex-157]; 2:4,1.1[Ex-168$]; 2:13,1.1[Ex-168$]; 2:14,1.2[Ex-168$]; 3:12,2.4[Ex-158]; 4:2,1.1[Ex-168$]; 5:5,1.4[Ex-168$]; 5:7,1.1[Ex-157]; 5:10,3.1[Ex-168$]; 5:11,1.1[Ex-168$]; 5:12,1.1[Ex-168$]; 5:12,2.2[Ex-168$]; 6:2,1.1[Ex-168$]; 6:5,4.2[Ex-168$]; 6:7,2.2[Ex-168$]; 6:11,1.3[Ex-158]; 7:2,1.2[Ex-166#]; 7:13,4.1[Ex-157]; 7:14,1.2[Ex-166#]; 7:14,2.3[Ex-166#]; 7:17,3.1[Ex-168$]; 7:17,4.1[Ex-168$]; 7:28,1.2[Ex-168$]; 7:34,1.3; 7:34,3.2[Ex-168$]; 7:36,1.2[Ex-168$]; 7:38,2.1[Ex-157]; 7:39,2.1[Ex-168$]; 8:1,1.2[Ex-168$]; 8:2,2.1[Ex-157]; 9:1,1.1[Ex-168$]; 9:10,1.1[Ex-168$]; 9:18,1.1[Ex-168$]; 10:28,3.1[Ex-168$]; 11:5,1.1[Ex-168$]; 11:14,1.1[Ex-168$]; 11:15,1.1[Ex-168$]; 12:2,1.3[Ex-160]; 12:9,1.1[Ex-168$]; 12:10,4.2[Ex-168$]; 12:11,1.2[Ex-168$]; 12:12,1.1[Ex-168$]; 12:13,1.1[Ex-168$]; 12:21,1.2[Ex-157]; 12:24,1.2[Ex-168$]; 12:25,1.1[Ex-168$]; 13:12,1.2[Ex-168$]; 13:13,1.2[Ex-168$]; 14:12,1.2[Ex-168$]; 14:32,1.2[Ex-168$]; 14:39,3.3[Ex-168$]; 15:15,1.2[Ex-156]; 15:25,1.2[Ex-168$]; 15:28,1.2[Ex-168$]; 15:31,2.1[Ex-168$]; 16:2,1.1[Ex-168$]; 16:6,3.2[Ex-168$]; 16:7,1.1[Ex-168$]; 16:10,1.2[Ex-168$]; 16:17,2.2[Ex-157]; 16:22,1.2[Ex-168$]; 16:24,1.1[Ex-168$]; Count = 68

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms l^249 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-151; (2) Ex-154; (3) Ex-165#; (4) Ex-168$; (5) Ex-161;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

3.2; 27.2; 31.1; 46.2; 54.2; 74.2; 77.2; 94.2; 107.2; 112.2; 114.2; 118.2; 122.2; 123.2; 124.2; 138.2; 157.2; 158.2; 160.2; 163.2; 194.2; 195.2; 197.2; 210.2; 224.1; 232.2; 243.2; 254.2; 269.2; 285.2; 288.2; 307.2; 333.2; 355.2; 379.2; 380.2; 382.2; 393.2; 419.2; 425.2; 429.2; 448.1; 464.2; 467.2; Total = 44

Variants different from Parent[1]: 3:10,2.1[Ex-154]; 3:12,2.2[Ex-154]; 3:13,2.1[Ex-154]; 3:17,1.2[Ex-168$]; 4:9,1.1[Ex-154]; 4:13,1.1[Ex-154]; 4:14,1.1[Ex-154]; Count = 7

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms l\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-146;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

3.1; Total = 1

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms l^846 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-149; (2) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

81.2; Total = 1

Variants different from Parent[1]: 4:9,1.1[Ex-168$]; 4:13,1.1[Ex-168$]; 12:31,1.1[Ex-168$]; Count = 3

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms l^1575 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-149; (2) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

81.2; Total = 1

Variants different from Parent[1]: 1:28,1.1[Ex-168$]; Count = 1

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms l^2211\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-149;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

81.2; Total = 1

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms l^2211^c \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-149;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

81.2; Total = 1

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ambst% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-156; (2) Ex-164; (3) Ex-168$; (4) Ex-163; (5) Ex-159; (6) Ex-155#; (7) Ex-165#; (8) Ex-158; (9) Ex-169$; (10) Ex-157;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

43.1; 66.1; 213.1; 214.1; 217.1; 315.1; 337.1; 380.0; 390.1; 392.1; 393.1; 399.2; 404.1; 405.1; 416.1; Total = 15

Variants different from Parent[1]: 1:2,1.2[Ex-164]; 1:22,1.2[Ex-168$]; 3:3,2.1[Ex-164]; 5:4,1.3[Ex-163]; 5:6,1.2[Ex-168$]; 6:11,1.1[Ex-164]; 6:14,1.1[Ex-168$]; 6:19,1.2[Ex-168$]; 7:20,1.2[Ex-168$]; 7:39,1.2[Ex-155#]; 8:2,3.2[Ex-168$]; 8:11,1.4[Ex-163]; 9:9,1.2[Ex-168$]; 9:15,1.1[Ex-164]; 10:20,1.1[Ex-168$]; 10:28,1.1[Ex-164]; 11:17,1.2[Ex-163]; 11:17,2.2[Ex-163]; 11:19,2.1[Ex-164]; 11:27,1.2[Ex-169$]; 11:27,2.2[Ex-168$]; 12:3,1.2[Ex-168$]; 12:3,2.2[Ex-169$]; 12:12,1.2[Ex-155#]; 12:21,1.1[Ex-164]; 12:27,1.2[Ex-168$]; 14:12,2.2[Ex-168$]; 14:14,1.2[Ex-164]; 14:33,1.3; 15:3,1.2[Ex-168$]; 15:10,1.3[Ex-169$]; 15:28,2.2[Ex-168$]; 15:31,2.2[Ex-169$]; 15:31,3.2[Ex-168$]; 15:50,1.2[Ex-168$]; 15:50,2.3[Ex-169$]; 15:54,3.2[Ex-168$]; 16:6,1.2[Ex-168$]; 16:12,1.2[Ex-168$]; 16:15,1.1[Ex-164]; 16:24,1.1[Ex-164]; Count = 41

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms BasA% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-166#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

77.0; 96.0; 123.0; 125.0; 126.0; 135.0; 136.0; 141.0; 152.0; 153.0; 159.0; 163.0; 170.0; 171.0; 173.0; 176.0; 195.0; 209.0; 219.0; 220.0; 229.0; 240.0; 257.0; 263.0; 265.0; 267.0; 269.0; 274.0; 276.0; 282.0; 289.0; 292.0; 296.0; 298.0; 302.0; 316.0; 318.0; 323.0; 326.0; 327.0; 328.0; 331.0; 338.0; 342.0; 345.0; 348.0; 349.0; 365.0; 367.0; 374.0; 377.0; 382.0; 395.0; 399.0; 407.0; 408.0; 412.0; 419.0; 421.0; 434.0; 440.0; 443.0; 458.0; 461.0; 465.0; Total = 65

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Cl^a% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-163; (2) Ex-168$; (3) Ex-164; (4) Ex-171$; (5) Ex-169$; (6) Ex-165#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

33.0; 94.0; 133.0; 210.0; 344.0; Total = 5

Variants different from Parent[1]: 1:23,1.2[Ex-168$]; 1:24,1.2[Ex-168$]; 2:10,1.2[Ex-168$]; 2:10,2.1[Ex-164]; 3:10,1.2[Ex-168$]; 3:12,2.4[Ex-171$]; 6:10,1.1[Ex-168$]; 7:5,1.2[Ex-168$]; 7:39,3.2[Ex-168$]; 7:40,1.2[Ex-168$]; 8:3,1.2[Ex-168$]; 8:3,2.2[Ex-169$]; 8:7,2.2[Ex-168$]; 8:8,2.1[Ex-164]; 8:11,1.1[Ex-164]; 8:13,1.2[Ex-168$]; 8:13,2.2[Ex-168$]; 9:20,1.2[Ex-169$]; 9:25,1.2[Ex-168$]; 10:20,3.3[Ex-169$]; 11:34,1.2[Ex-168$]; 12:9,3.2[Ex-168$]; 12:11,1.1[Ex-164]; 12:13,2.2[Ex-168$]; 13:13,1.2[Ex-168$]; Count = 25

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Cl^b% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-163; (2) Ex-168$; (3) Ex-164; (4) Ex-165#; (5) Ex-171$; (6) Ex-169$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

33.0; 94.0; 133.0; 210.0; 344.0; Total = 5

Variants different from Parent[1]: 1:23,1.2[Ex-168$]; 1:24,1.2[Ex-168$]; 2:10,1.2[Ex-168$]; 2:10,2.1[Ex-164]; 2:14,1.2[Ex-168$]; 3:10,1.2[Ex-168$]; 3:12,2.4[Ex-171$]; 4:15,2.2[Ex-168$]; 6:10,1.1[Ex-168$]; 7:5,1.2[Ex-168$]; 7:39,3.2[Ex-168$]; 7:40,1.2[Ex-168$]; 8:3,1.2[Ex-168$]; 8:3,2.2[Ex-169$]; 8:7,2.2[Ex-168$]; 8:8,2.1[Ex-164]; 8:11,1.1[Ex-164]; 8:13,1.2[Ex-168$]; 8:13,2.2[Ex-168$]; 9:20,1.2[Ex-169$]; 9:25,1.2[Ex-168$]; 10:20,3.3[Ex-169$]; 11:34,1.2[Ex-168$]; 12:9,3.2[Ex-168$]; 12:11,1.1[Ex-164]; 12:13,2.2[Ex-168$]; 13:5,2.3[Ex-164]; 13:8,1.1[Ex-164]; 13:12,1.2[Ex-168$]; 13:13,1.2[Ex-168$]; 15:50,2.1[Ex-168$]; Count = 31

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Cyp^a% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-156; (2) Ex-168$; (3) Ex-169$; (4) Ex-164;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

43.0; 66.0; 213.0; 214.0; 217.0; 315.0; 337.0; 380.0; 390.0; 392.0; 393.0; 399.0; 404.0; 405.0; 416.0; Total = 15

Variants different from Parent[1]: 1:22,1.2[Ex-168$]; 6:2,1.2[Ex-169$]; 6:11,1.1[Ex-168$]; 15:54,2.2[Ex-168$]; 15:54,3.2[Ex-168$]; 15:54,4.2[Ex-168$]; Count = 6

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Did^a% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-163; (2) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

33.0; 94.0; 133.0; 210.0; 344.0; Total = 5

Variants different from Parent[1]: 7:29,2.2[Ex-168$]; 12:3,2.1[Ex-168$]; Count = 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Did^b% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-166#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

77.0; 96.0; 123.0; 125.0; 126.0; 135.0; 136.0; 141.0; 152.0; 153.0; 159.0; 163.0; 170.0; 171.0; 173.0; 176.0; 195.0; 209.0; 219.0; 220.0; 229.0; 240.0; 257.0; 263.0; 265.0; 267.0; 269.0; 274.0; 276.0; 282.0; 289.0; 292.0; 296.0; 298.0; 302.0; 316.0; 318.0; 323.0; 326.0; 327.0; 328.0; 331.0; 338.0; 342.0; 345.0; 348.0; 349.0; 365.0; 367.0; 374.0; 377.0; 382.0; 395.0; 399.0; 407.0; 408.0; 412.0; 419.0; 421.0; 434.0; 440.0; 443.0; 458.0; 461.0; 465.0; Total = 65

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Epiph^a% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-163; (2) Ex-168$; (3) Ex-155#; (4) Ex-169$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

33.0; 94.0; 133.0; 210.0; 344.0; Total = 5

Variants different from Parent[1]: 7:34,3.2[Ex-168$]; 7:39,1.2[Ex-155#]; 7:39,3.2[Ex-168$]; 10:11,1.1[Ex-169$]; 14:34,4.1[Ex-168$]; 15:14,2.2[Ex-169$]; 15:25,1.2[Ex-168$]; Count = 7

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Epiph^b% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-163; (2) Ex-168$; (3) Ex-155#; (4) Ex-165#; (5) Ex-169$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

33.0; 94.0; 133.0; 210.0; 344.0; Total = 5

Variants different from Parent[1]: 3:20,1.2[Ex-168$]; 7:34,3.2[Ex-168$]; 7:39,1.2[Ex-155#]; 7:39,3.2[Ex-168$]; 10:11,1.1[Ex-165#]; 14:34,4.1[Ex-168$]; 15:14,2.2[Ex-169$]; 15:25,1.2[Ex-168$]; Count = 8

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Eus^a% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-163; (2) Ex-168$; (3) Ex-155#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

33.0; 94.0; 133.0; 210.0; 344.0; Total = 5

Variants different from Parent[1]: 1:6,1.2[Ex-168$]; 7:35,2.2[Ex-155#]; 15:54,3.2[Ex-168$]; Count = 3

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Eus^b% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-163; (2) Ex-168$; (3) Ex-155#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

33.0; 94.0; 133.0; 210.0; 344.0; Total = 5

Variants different from Parent[1]: 1:6,1.2[Ex-168$]; 7:35,2.2[Ex-155#]; Count = 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Hier^a% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-166#; (2) Ex-169$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

77.0; 96.0; 123.0; 125.0; 126.0; 135.0; 136.0; 141.0; 152.0; 153.0; 159.0; 163.0; 170.0; 171.0; 173.0; 176.0; 195.0; 209.0; 219.0; 220.0; 229.0; 240.0; 257.0; 263.0; 265.0; 267.0; 269.0; 274.0; 276.0; 282.0; 289.0; 292.0; 296.0; 298.0; 302.0; 316.0; 318.0; 323.0; 326.0; 327.0; 328.0; 331.0; 338.0; 342.0; 345.0; 348.0; 349.0; 365.0; 367.0; 374.0; 377.0; 382.0; 395.0; 399.0; 407.0; 408.0; 412.0; 419.0; 421.0; 434.0; 440.0; 443.0; 458.0; 461.0; 465.0; Total = 65

Variants different from Parent[1]: 15:51,3.2[Ex-169$]; Count = 1

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Hier^b% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-165#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

16.0; 30.0; 31.0; 41.0; 64.0; 67.0; 75.0; 105.0; 108.0; 115.0; 148.0; 156.0; 204.0; 207.0; 210.0; 218.0; 227.0; 250.0; 255.0; 262.0; 266.0; 281.0; 309.0; 310.0; 343.0; 352.0; 376.0; 387.0; 403.0; 410.0; 424.0; 468.0; Total = 32

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Hipp% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-166#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

77.0; 96.0; 123.0; 125.0; 126.0; 135.0; 136.0; 141.0; 152.0; 153.0; 159.0; 163.0; 170.0; 171.0; 173.0; 176.0; 195.0; 209.0; 219.0; 220.0; 229.0; 240.0; 257.0; 263.0; 265.0; 267.0; 269.0; 274.0; 276.0; 282.0; 289.0; 292.0; 296.0; 298.0; 302.0; 316.0; 318.0; 323.0; 326.0; 327.0; 328.0; 331.0; 338.0; 342.0; 345.0; 348.0; 349.0; 365.0; 367.0; 374.0; 377.0; 382.0; 395.0; 399.0; 407.0; 408.0; 412.0; 419.0; 421.0; 434.0; 440.0; 443.0; 458.0; 461.0; 465.0; Total = 65

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ir% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-162; (2) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

24.0; 50.0; 54.0; 215.0; 223.0; 466.0; Total = 6

Variants different from Parent[1]: 3:17,1.2[Ex-168$]; 3:17,2.2[Ex-168$]; Count = 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Irarm% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-157; (2) Ex-169$; (3) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

1.0; 16.0; 35.0; 39.0; 42.0; 71.0; 89.0; 94.0; 96.0; 113.0; 125.0; 126.0; 135.0; 147.0; 156.0; 174.0; 188.0; 210.0; 225.0; 227.0; 244.0; 245.0; 246.0; 250.0; 256.0; 275.0; 305.0; 312.0; 322.0; 329.0; 330.0; 334.0; 335.0; 338.0; 347.0; 359.0; 369.0; 373.0; 379.0; 396.0; 399.0; 420.0; 426.0; 429.0; 433.0; 438.0; 442.0; 443.0; 448.0; 461.0; 462.0; 468.0; Total = 52

Variants different from Parent[1]: 6:10,2.2[Ex-169$]; 10:11,1.2[Ex-168$]; Count = 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Irlat^a% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-163; (2) Ex-168$; (3) Ex-169$; (4) Ex-164; (5) Ex-155#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

33.0; 94.0; 133.0; 210.0; 344.0; Total = 5

Variants different from Parent[1]: 5:6,2.3; 6:11,1.1[Ex-168$]; 6:20,1.3[Ex-169$]; 8:6,1.2[Ex-168$]; 10:8,1.2[Ex-155#]; 10:11,1.2[Ex-168$]; 13:12,1.4[Ex-169$]; 15:3,1.2[Ex-168$]; 15:15,1.2[Ex-169$]; 15:45,1.2[Ex-168$]; 15:50,1.2[Ex-168$]; 15:54,3.2[Ex-168$]; Count = 12

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Irlat^b% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-159; (2) Ex-169$; (3) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

126.0; 163.0; 263.0; 274.0; 293.0; Total = 5

Variants different from Parent[1]: 10:16,1.2[Ex-168$]; 15:50,2.3[Ex-169$]; Count = 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Lcf% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-157; (2) Ex-160; (3) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

1.0; 16.0; 35.0; 39.0; 42.0; 71.0; 89.0; 94.0; 96.0; 113.0; 125.0; 126.0; 135.0; 147.0; 156.0; 174.0; 188.0; 210.0; 225.0; 227.0; 244.0; 245.0; 246.0; 250.0; 256.0; 275.0; 305.0; 312.0; 322.0; 329.0; 330.0; 334.0; 335.0; 338.0; 347.0; 359.0; 369.0; 373.0; 379.0; 396.0; 399.0; 420.0; 426.0; 429.0; 433.0; 438.0; 442.0; 443.0; 448.0; 461.0; 462.0; 468.0; Total = 52

Variants different from Parent[1]: 5:3,1.2[Ex-160]; 5:6,1.2[Ex-168$]; Count = 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms McionA% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-166#; (2) Ex-169$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

77.0; 96.0; 123.0; 125.0; 126.0; 135.0; 136.0; 141.0; 152.0; 153.0; 159.0; 163.0; 170.0; 171.0; 173.0; 176.0; 195.0; 209.0; 219.0; 220.0; 229.0; 240.0; 257.0; 263.0; 265.0; 267.0; 269.0; 274.0; 276.0; 282.0; 289.0; 292.0; 296.0; 298.0; 302.0; 316.0; 318.0; 323.0; 326.0; 327.0; 328.0; 331.0; 338.0; 342.0; 345.0; 348.0; 349.0; 365.0; 367.0; 374.0; 377.0; 382.0; 395.0; 399.0; 407.0; 408.0; 412.0; 419.0; 421.0; 434.0; 440.0; 443.0; 458.0; 461.0; 465.0; Total = 65

Variants different from Parent[1]: 15:47,1.2[Ex-169$]; Count = 1

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms McionE% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-156; (2) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

43.0; 66.0; 213.0; 214.0; 217.0; 315.0; 337.0; 380.0; 390.0; 392.0; 393.0; 399.0; 404.0; 405.0; 416.0; Total = 15

Variants different from Parent[1]: 3:20,1.2[Ex-168$]; 14:34,3.2[Ex-168$]; Count = 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms McionT% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-157; (2) Ex-169$; (3) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

1.0; 16.0; 35.0; 39.0; 42.0; 71.0; 89.0; 94.0; 96.0; 113.0; 125.0; 126.0; 135.0; 147.0; 156.0; 174.0; 188.0; 210.0; 225.0; 227.0; 244.0; 245.0; 246.0; 250.0; 256.0; 275.0; 305.0; 312.0; 322.0; 329.0; 330.0; 334.0; 335.0; 338.0; 347.0; 359.0; 369.0; 373.0; 379.0; 396.0; 399.0; 420.0; 426.0; 429.0; 433.0; 438.0; 442.0; 443.0; 448.0; 461.0; 462.0; 468.0; Total = 52

Variants different from Parent[1]: 15:50,1.2[Ex-168$]; 15:50,2.3[Ex-169$]; Count = 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Meth% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-159; (2) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

126.0; 163.0; 263.0; 274.0; 293.0; Total = 5

Variants different from Parent[1]: 6:15,1.2[Ex-168$]; Count = 1

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Or^a% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-158; (2) Ex-168$; (3) Ex-169$; (4) Ex-166#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

20.0; 30.0; 33.0; 39.0; 47.0; 49.0; 50.0; 65.0; 69.0; 75.0; 82.0; 86.0; 89.0; 101.0; 108.0; 115.0; 116.0; 125.0; 132.0; 142.0; 143.0; 166.0; 173.0; 175.0; 190.0; 202.0; 219.0; 229.0; 259.0; 266.0; 268.0; 285.0; 299.0; 321.0; 335.0; 336.0; 337.0; 349.0; 353.0; 364.0; 365.0; 376.0; 388.0; 410.0; 412.0; 415.0; 417.0; 431.0; 435.0; 452.0; 460.0; Total = 51

Variants different from Parent[1]: 8:8,2.2[Ex-168$]; 8:8,3.2[Ex-169$]; 12:31,1.2[Ex-166#]; 13:12,1.4[Ex-169$]; Count = 4

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Or^b% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-164; (2) Ex-169$; (3) Ex-166#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

3.0; 5.0; 9.0; 15.0; 19.0; 22.0; 34.0; 40.0; 52.0; 92.0; 123.0; 126.0; 139.0; 150.0; 183.0; 184.0; 201.0; 208.0; 209.0; 243.0; 290.0; 291.0; 293.0; 296.0; 320.0; 326.0; 327.0; 342.0; 351.0; 371.0; 374.0; 378.0; 383.0; 398.0; 400.0; 402.0; 403.0; 421.0; 422.0; 437.0; 439.0; 444.0; 446.0; 453.0; 456.0; 464.0; 469.0; Total = 47

Variants different from Parent[1]: 8:8,3.2[Ex-169$]; 12:31,1.2[Ex-166#]; 13:12,1.4[Ex-169$]; Count = 3

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Or^lat^a% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-166#;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

77.0; 96.0; 123.0; 125.0; 126.0; 135.0; 136.0; 141.0; 152.0; 153.0; 159.0; 163.0; 170.0; 171.0; 173.0; 176.0; 195.0; 209.0; 219.0; 220.0; 229.0; 240.0; 257.0; 263.0; 265.0; 267.0; 269.0; 274.0; 276.0; 282.0; 289.0; 292.0; 296.0; 298.0; 302.0; 316.0; 318.0; 323.0; 326.0; 327.0; 328.0; 331.0; 338.0; 342.0; 345.0; 348.0; 349.0; 365.0; 367.0; 374.0; 377.0; 382.0; 395.0; 399.0; 407.0; 408.0; 412.0; 419.0; 421.0; 434.0; 440.0; 443.0; 458.0; 461.0; 465.0; Total = 65

Variants different from Parent[1]: Count = 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Pel% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-156; (2) Ex-165#; (3) Ex-154; (4) Ex-168$; (5) Ex-169$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

43.0; 66.0; 213.0; 214.0; 217.0; 315.0; 337.0; 380.0; 390.0; 392.0; 393.0; 399.0; 404.0; 405.0; 416.0; Total = 15

Variants different from Parent[1]: 9:7,1.1[Ex-165#]; 9:15,1.1[Ex-165#]; 11:29,2.1[Ex-165#]; 14:6,1.2[Ex-154]; 14:12,1.2[Ex-168$]; 15:31,2.2[Ex-169$]; 15:31,3.2[Ex-168$]; 16:15,1.3[Ex-169$]; Count = 8

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ptol^Ir% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-162; (2) Ex-168$;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

24.0; 50.0; 54.0; 215.0; 223.0; 466.0; Total = 6

Variants different from Parent[1]: 2:14,1.2[Ex-168$]; 11:10,1.2[Ex-168$]; Count = 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Spec% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-156; (2) Ex-164; (3) Ex-168$; (4) Ex-158;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

43.0; 66.0; 213.0; 214.0; 217.0; 315.0; 337.0; 380.0; 390.0; 392.0; 393.0; 399.0; 404.0; 405.0; 416.0; Total = 15

Variants different from Parent[1]: 2:10,1.2[Ex-164]; 6:10,1.1[Ex-168$]; 6:16,1.2[Ex-168$]; 10:20,1.1[Ex-168$]; 10:31,1.2[Ex-168$]; 12:3,1.2[Ex-168$]; 14:12,1.2[Ex-168$]; Count = 7

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Tert% \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-159; (2) Ex-168$; (3) Ex-165#; (4) Ex-158; (5) Ex-169$; (6) Ex-164;

Primary Descendants:

Secondary Descendants:

The Variants in the Sibling Gene:

126.0; 163.0; 263.0; 274.0; 293.0; Total = 5

Variants different from Parent[1]: 1:15,1.2[Ex-168$]; 1:22,1.2[Ex-168$]; 1:28,1.1[Ex-168$]; 3:16,1.2[Ex-168$]; 6:11,1.1[Ex-168$]; 7:13,4.2[Ex-168$]; 7:34,4.2[Ex-168$]; 7:40,4.2[Ex-169$]; 9:5,1.2[Ex-168$]; 9:15,1.1[Ex-165#]; 15:54,2.2[Ex-168$]; 15:54,3.2[Ex-168$]; 15:54,4.2[Ex-168$]; Count = 13

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-144 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-158; (2) Ex-168$; (3) Ex-161;

Primary Descendants: (1) B\*; (2) B^1;

Secondary Descendants: (1) G012\*; (2) G012^c; (3) Ex-150; (4) 326;

The Variants in the Sibling Gene:

20.1; 30.1; 33.1; 39.1; 47.1; 49.1; 50.1; 65.1; 69.1; 75.1; 82.1; 86.1; 89.1; 101.1; 108.1; 115.1; 116.1; 125.2; 132.1; 142.1; 143.1; 166.1; 173.1; 175.1; 190.1; 202.1; 219.1; 229.1; 259.1; 266.1; 268.1; 285.1; 299.1; 321.1; 335.1; 336.1; 337.1; 349.1; 353.1; 364.1; 365.1; 376.1; 388.1; 410.1; 412.1; 415.1; 417.1; 431.1; 435.1; 452.1; 460.1; Total = 51

Variants different from Parent[1]: 1:6,1.2[Ex-168$]; 9:9,2.1[Ex-168$]; 11:3,1.2; 14:39,1.1[Ex-168$]; Count = 4

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-145 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-149;

Primary Descendants: (1) 1; (2) 42; (3) 131\*; (4) 440; (5) 2495;

Secondary Descendants:

The Variants in the Sibling Gene:

81.2; Total = 1

Variants different from Parent[1]: 2:4,1.3; Count = 1

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-146 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-149; (2) Ex-169$;

Primary Descendants: (1) pm^a; (2) l\*; (3) sy^p%;

Secondary Descendants:

The Variants in the Sibling Gene:

81.2; Total = 1

Variants different from Parent[1]: 1:2,1.1[Ex-169$]; Count = 1

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-147 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-150; (2) Ex-160; (3) Ex-158; (4) Ex-169$; (5) Ex-168$; (6) Ex-155#; (7) Ex-151; (8) Ex-157; (9) Ex-159;

Primary Descendants: (1) 1881^c; (2) 1881\*; (3) P^68%;

Secondary Descendants:

The Variants in the Sibling Gene:

4.2; 22.2; 25.2; 27.2; 32.2; 40.2; 68.2; 74.2; 82.2; 88.1; 92.2; 101.1; 108.1; 112.2; 117.2; 124.2; 126.2; 134.2; 143.2; 146.1; 169.1; 177.2; 184.2; 199.1; 206.1; 208.1; 210.1; 211.2; 219.2; 222.1; 233.2; 243.2; 250.1; 253.1; 289.1; 304.2; 307.2; 312.2; 313.2; 320.2; 321.2; 326.2; 327.2; 328.1; 342.2; 348.1; 354.1; 357.2; 362.1; 367.2; 371.2; 372.1; 376.2; 378.1; 389.1; 395.2; 397.1; 399.1; 402.2; 407.1; 414.2; 427.2; 433.1; 439.1; 441.2; 447.2; 448.2; 453.2; 456.2; 461.2; 467.1; 468.2; Total = 72

Variants different from Parent[1]: 1:14,1.1[Ex-160]; 1:15,1.2[Ex-160]; 1:28,1.2[Ex-158]; 2:2,1.3[Ex-169$]; 2:10,1.1[Ex-160]; 2:12,2.2[Ex-168$]; 2:15,1.2[Ex-158]; 3:1,1.2[Ex-168$]; 3:5,1.2[Ex-168$]; 3:5,2.2[Ex-168$]; 3:5,4.2[Ex-168$]; 3:10,2.2[Ex-155#]; 3:12,2.1[Ex-160]; 3:13,2.2[Ex-160]; 3:14,1.1[Ex-160]; 3:16,1.1[Ex-160]; 4:14,1.2[Ex-160]; 5:1,1.2[Ex-155#]; 5:4,1.3[Ex-169$]; 5:5,1.4[Ex-168$]; 5:7,2.2[Ex-155#]; 5:10,2.2[Ex-160]; 5:11,2.2[Ex-169$]; 6:2,2.2[Ex-169$]; 6:5,3.2[Ex-168$]; 6:7,2.2[Ex-168$]; 6:14,1.1[Ex-168$]; 6:19,1.2[Ex-168$]; 7:10,1.2[Ex-168$]; 7:13,4.2[Ex-168$]; 7:14,2.2[Ex-155#]; 7:17,2.1[Ex-168$]; 7:17,3.3[Ex-169$]; 7:17,4.3[Ex-169$]; 7:18,1.2[Ex-168$]; 7:37,1.2[Ex-155#]; 8:6,3.2[Ex-168$]; 8:7,2.2[Ex-168$]; 8:8,2.2[Ex-160]; 8:8,3.2[Ex-160]; 8:11,2.3[Ex-169$]; 9:2,1.2[Ex-168$]; 9:7,1.2[Ex-160]; 9:7,2.1[Ex-155#]; 9:9,2.2[Ex-158]; 9:10,1.2[Ex-160]; 9:13,1.2[Ex-160]; 9:16,2.3[Ex-168$]; 9:18,1.2[Ex-169$]; 9:20,1.1[Ex-160]; 9:20,2.2[Ex-168$]; 9:22,1.2[Ex-155#]; 10:4,2.2[Ex-168$]; 10:18,1.2[Ex-158]; 10:19,2.2[Ex-169$]; 10:20,2.2[Ex-160]; 11:17,1.1[Ex-160]; 11:17,2.1[Ex-160]; 11:29,1.2[Ex-160]; 11:31,1.2[Ex-155#]; 12:6,1.1[Ex-160]; 12:6,2.1[Ex-160]; 12:9,1.2[Ex-169$]; 12:13,2.2[Ex-168$]; 12:26,1.1[Ex-168$]; 12:26,2.1[Ex-160]; 13:2,1.2[Ex-169$]; 13:8,1.2[Ex-160]; 13:11,1.2[Ex-155#]; 14:2,1.2[Ex-168$]; 14:16,2.3[Ex-157]; 14:21,2.2[Ex-160]; 14:25,1.2[Ex-168$]; 14:25,3.1[Ex-158]; 14:34,3.2[Ex-168$]; 14:38,1.2[Ex-158]; 15:10,2.1[Ex-168$]; 15:24,1.2[Ex-160]; 15:28,1.1[Ex-160]; 15:28,3.1[Ex-168$]; 15:31,1.2[Ex-168$]; 15:34,1.2[Ex-168$]; 15:49,1.1[Ex-158]; 15:51,2.2[Ex-160]; 15:51,3.1[Ex-158]; 15:52,1.1[Ex-158]; 15:54,3.3[Ex-155#]; 16:17,2.1[Ex-158]; Count = 88

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-148 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-149; (2) Ex-161; (3) Ex-165#; (4) Ex-166#; (5) Ex-168$;

Primary Descendants: (1) 945; (2) 6; (3) L019\*%;

Secondary Descendants: (1) 630%; (2) 1881\*;

The Variants in the Sibling Gene:

81.2; Total = 1

Variants different from Parent[1]: 3:1,1.1[Ex-161]; 4:9,1.1[Ex-161]; 4:14,1.1[Ex-161]; 4:17,2.1[Ex-161]; 9:16,2.3[Ex-168$]; 10:19,2.2[Ex-161]; 12:31,1.1[Ex-161]; 13:3,1.2[Ex-166#]; 14:11,1.2[Ex-166#]; 14:21,2.1[Ex-161]; Count = 10

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-149 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-151; (2) Ex-169$;

Primary Descendants: (1) l^2211\*; (2) 69; (3) 309; (4) 323\*; (5) 326; (6) 491; (7) 614\*; (8) 629; (9) 1611; (10) 2138; (11) pm^b; (12) l^846; (13) l^1575; (14) l^2211^c; (15) TR; (16) HF; (17) RP; (18) Ex-146; (19) Ex-148; (20) Ex-145;

Secondary Descendants:

The Variants in the Sibling Gene:

3.2; 27.2; 31.1; 46.2; 54.2; 74.2; 77.2; 94.2; 107.2; 112.2; 114.2; 118.2; 122.2; 123.2; 124.2; 138.2; 157.2; 158.2; 160.2; 163.2; 194.2; 195.2; 197.2; 210.2; 224.1; 232.2; 243.2; 254.2; 269.2; 285.2; 288.2; 307.2; 333.2; 355.2; 379.2; 380.2; 382.2; 393.2; 419.2; 425.2; 429.2; 448.1; 464.2; 467.2; Total = 44

Variants different from Parent[1]: 4:11,1.2[Ex-169$]; Count = 1

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-150 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-153; (2) Ex-155#; (3) Ex-164; (4) Ex-151; (5) Ex-168$; (6) Ex-169$; (7) Ex-158; (8) Ex-144; (9) Ex-166#; (10) Ex-157; (11) Ex-170$;

Primary Descendants: (1) 1739^c; (2) 1739\*; (3) 0121%; (4) 0243\*%; (5) 0243^c%; (6) 630%; (7) Ex-147;

Secondary Descendants: (1) 6;

The Variants in the Sibling Gene:

33.2; 34.1; 49.1; 64.2; 69.2; 81.2; 95.1; 99.2; 106.2; 114.2; 115.1; 125.1; 128.1; 154.2; 187.2; 190.2; 195.2; 252.2; 266.1; 276.2; 281.2; 285.2; 293.1; 333.2; 401.2; 415.2; 422.2; 445.2; 455.2; 460.1; 464.2; 469.1; Total = 32

Variants different from Parent[1]: 1:2,2.2[Ex-155#]; 1:18,1.2[Ex-164]; 1:20,1.2[Ex-155#]; 1:23,1.2[Ex-151]; 1:30,1.2[Ex-168$]; 2:10,1.2[Ex-164]; 3:14,1.2[Ex-151]; 4:2,1.2[Ex-151]; 4:13,1.2[Ex-155#]; 4:17,1.1[Ex-155#]; 5:2,2.2[Ex-164]; 5:8,1.3; 5:11,2.1[Ex-155#]; 5:13,2.2[Ex-168$]; 6:5,2.2[Ex-168$]; 6:10,2.2[Ex-151]; 6:14,1.2[Ex-164]; 6:20,2.2[Ex-151]; 7:7,1.2[Ex-155#]; 7:9,1.1[Ex-155#]; 7:31,1.3[Ex-155#]; 7:35,2.2[Ex-155#]; 7:38,3.2[Ex-164]; 8:3,2.1[Ex-155#]; 8:8,1.1[Ex-155#]; 8:8,3.1[Ex-164]; 8:11,1.3[Ex-155#]; 8:11,2.2[Ex-168$]; 9:7,2.2[Ex-158]; 9:9,2.1[Ex-168$]; 9:20,1.2[Ex-169$]; 10:2,1.2[Ex-164]; 10:9,1.1[Ex-155#]; 10:10,1.1[Ex-155#]; 11:15,1.3[Ex-166#]; 11:24,4.2[Ex-155#]; 11:27,1.2[Ex-151]; 11:32,1.2[Ex-151]; 11:34,1.2[Ex-155#]; 12:6,1.2[Ex-164]; 12:6,2.2[Ex-169$]; 12:10,2.2[Ex-164]; 12:10,3.2[Ex-164]; 12:10,4.1[Ex-155#]; 12:26,1.2[Ex-164]; 13:3,1.3[Ex-151]; 13:8,3.1[Ex-155#]; 13:12,1.2[Ex-168$]; 14:5,1.3[Ex-169$]; 14:11,1.2[Ex-168$]; 14:14,1.2[Ex-164]; 14:15,1.1[Ex-155#]; 14:16,2.2[Ex-151]; 14:18,2.1[Ex-164]; 14:31,1.3; 14:34,4.2[Ex-151]; 14:34,6.1[Ex-155#]; 14:37,1.5[Ex-157]; 14:39,2.2[Ex-164]; 15:5,1.1[Ex-155#]; 15:14,1.2[Ex-155#]; 15:31,2.2[Ex-151]; 15:47,1.3[Ex-155#]; 15:51,2.1[Ex-164]; 15:52,1.2[Ex-168$]; 16:2,1.2[Ex-155#]; 16:2,2.2[Ex-155#]; 16:6,3.2[Ex-164]; 16:10,1.2[Ex-164]; 16:17,2.2[Ex-166#]; 16:22,1.3[Ex-151]; 16:23,1.2[Ex-155#]; Count = 72

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-151 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-152; (2) Ex-164; (3) Ex-168$; (4) Ex-165#; (5) Ex-162; (6) Ex-169$; (7) Ex-163; (8) Ex-166#;

Primary Descendants: (1) l^249; (2) D06^2; (3) 075%; (4) sy^h%; (5) Ex-149;

Secondary Descendants: (1) F\*; (2) G012\*; (3) G012^c; (4) Ex-150; (5) vg^st; (6) 33\*; (7) Ex-147; (8) Ex-153; (9) vg^cl; (10) it-ar;

The Variants in the Sibling Gene:

17.2; 34.2; 51.2; 60.2; 61.2; 68.2; 89.2; 91.2; 92.2; 93.2; 94.2; 106.2; 109.2; 125.2; 134.2; 135.2; 141.2; 148.2; 149.2; 172.2; 173.2; 183.2; 187.2; 211.2; 215.2; 216.2; 225.2; 234.2; 235.2; 236.2; 241.2; 246.2; 252.2; 256.2; 273.2; 276.2; 278.2; 282.2; 289.2; 301.2; 312.2; 318.2; 319.2; 345.2; 348.2; 362.2; 365.2; 375.2; 376.2; 378.1; 384.2; 394.2; 395.2; 399.2; 418.2; 427.2; 450.2; 454.2; 465.2; Total = 59

Variants different from Parent[1]: 1:2,1.2[Ex-164]; 1:23,1.2[Ex-168$]; 1:29,1.1[Ex-164]; 2:13,1.2[Ex-169$]; 3:3,2.2[Ex-162]; 4:2,1.2[Ex-169$]; 4:6,1.2[Ex-162]; 5:4,1.3[Ex-169$]; 5:11,1.2[Ex-169$]; 5:13,2.3; 6:2,1.2[Ex-169$]; 6:5,3.3; 6:8,1.2; 6:10,1.2[Ex-164]; 6:10,2.2[Ex-169$]; 7:3,1.2; 7:17,3.2; 7:17,4.2; 7:18,1.3; 7:22,1.2[Ex-162]; 8:2,1.2; 8:2,2.2[Ex-168$]; 8:2,4.3; 8:11,1.4[Ex-169$]; 9:12,1.1[Ex-164]; 9:18,2.2[Ex-168$]; 10:2,1.2[Ex-164]; 10:10,2.3; 10:20,2.2[Ex-168$]; 11:5,1.2[Ex-169$]; 11:14,1.2[Ex-169$]; 11:27,1.2[Ex-169$]; 12:13,1.2[Ex-169$]; 13:10,1.2[Ex-168$]; 14:18,3.2; 14:19,1.3[Ex-168$]; 14:21,2.2[Ex-168$]; 14:34,2.2[Ex-168$]; 15:24,1.2[Ex-162]; 15:29,1.2[Ex-169$]; 15:34,1.2[Ex-168$]; 16:2,2.1[Ex-164]; 16:19,3.2[Ex-164]; 16:22,1.3[Ex-169$]; Count = 44

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-152 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-155#; (2) Ex-168$; (3) Ex-169$; (4) Ex-166#;

Primary Descendants: (1) 044\*; (2) Ex-151;

Secondary Descendants: (1) D06^c%; (2) it-r%; (3) P025\*%; (4) 81\*%; (5) 1505\*%; (6) G012\*; (7) G012^c; (8) C^3%; (9) 33\*; (10) F\*; (11) it-ar; (12) 104\*%; (13) 365%; (14) 1175\*%; (15) 1175^c%; (16) 2464\*%; (17) 1881^c;

The Variants in the Sibling Gene:

2.2; 4.2; 25.2; 33.2; 35.2; 49.2; 56.1; 58.2; 59.2; 63.2; 78.2; 79.2; 82.2; 90.2; 96.2; 99.2; 100.2; 104.2; 140.2; 143.2; 144.2; 145.2; 151.2; 153.2; 169.1; 177.2; 180.2; 182.2; 185.2; 186.2; 200.2; 223.2; 224.2; 226.2; 231.2; 237.2; 238.2; 239.2; 248.2; 260.2; 271.2; 272.2; 290.1; 291.1; 304.2; 306.2; 311.2; 313.2; 321.1; 322.2; 324.2; 329.2; 332.2; 340.2; 341.2; 347.2; 356.2; 359.2; 366.2; 370.2; 400.2; 409.2; 433.1; 445.1; 447.2; 448.2; Total = 66

Variants different from Parent[1]: 1:15,1.2[Ex-168$]; 2:2,1.3[Ex-169$]; 3:1,1.2[Ex-168$]; 3:5,3.2[Ex-169$]; 3:5,4.2[Ex-168$]; 3:14,1.2[Ex-168$]; 4:17,2.2[Ex-169$]; 5:2,1.2; 5:2,2.2[Ex-168$]; 5:3,1.2[Ex-169$]; 5:4,1.2[Ex-168$]; 5:10,3.2[Ex-169$]; 5:12,1.2[Ex-169$]; 6:11,1.2[Ex-169$]; 6:20,2.2[Ex-169$]; 7:1,1.2[Ex-166#]; 7:5,3.2[Ex-168$]; 7:13,1.2[Ex-168$]; 7:13,2.2; 7:34,1.2[Ex-169$]; 7:34,2.3[Ex-168$]; 7:38,2.3; 7:39,2.2[Ex-169$]; 8:11,2.3[Ex-169$]; 9:1,1.2[Ex-169$]; 9:2,1.2[Ex-168$]; 9:13,1.2[Ex-169$]; 9:20,2.2[Ex-168$]; 9:21,1.2; 9:21,2.2; 9:23,1.2; 10:4,2.2[Ex-168$]; 10:9,3.2[Ex-168$]; 10:11,2.2[Ex-168$]; 10:24,1.2; 10:28,1.2[Ex-166#]; 10:28,3.2[Ex-169$]; 11:2,1.2[Ex-166#]; 11:15,1.2[Ex-169$]; 11:24,1.2[Ex-169$]; 11:32,1.2[Ex-168$]; 12:3,2.2[Ex-169$]; 12:3,3.2[Ex-168$]; 12:31,1.2[Ex-166#]; 13:3,1.3[Ex-168$]; 14:5,1.2; 14:8,1.2[Ex-166#]; 14:16,1.2[Ex-168$]; 14:16,2.2[Ex-169$]; 14:18,2.1[Ex-168$]; 14:25,1.2[Ex-168$]; 14:34,3.2[Ex-168$]; 14:34,4.2[Ex-166#]; 14:37,1.4[Ex-166#]; 15:20,1.2; 15:31,2.2[Ex-169$]; 16:4,1.2[Ex-168$]; 16:7,1.2[Ex-169$]; 16:19,4.2[Ex-166#]; Count = 59

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-153 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-154; (2) Ex-155#; (3) Ex-164; (4) Ex-158; (5) Ex-169$; (6) Ex-151; (7) Ex-168$; (8) Ex-166#; (9) Ex-159;

Primary Descendants: (1) 33\*; (2) 365%; (3) 1506%; (4) Ex-150;

Secondary Descendants: (1) F\*; (2) G012\*; (3) G012^c; (4) 6; (5) it-ar; (6) 629; (7) L019\*%; (8) 326;

The Variants in the Sibling Gene:

65.2; 107.2; 120.2; 199.2; 206.2; 251.2; 253.2; 262.2; 328.2; 341.2; 363.2; 386.2; 412.2; Total = 13

Variants different from Parent[1]: 2:1,1.2[Ex-155#]; 2:2,1.1[Ex-164]; 2:15,1.5[Ex-169$]; 3:12,1.2[Ex-155#]; 3:16,1.2[Ex-158]; 4:11,1.2[Ex-169$]; 5:4,2.3; 5:7,1.2[Ex-155#]; 5:10,3.2[Ex-169$]; 6:2,1.2[Ex-169$]; 6:2,2.1[Ex-155#]; 6:11,1.3[Ex-158]; 6:15,2.1[Ex-155#]; 7:15,1.2[Ex-155#]; 7:39,2.2[Ex-169$]; 7:40,2.2[Ex-158]; 8:2,2.2[Ex-151]; 10:9,3.2[Ex-151]; 10:19,2.1[Ex-155#]; 10:28,1.2[Ex-151]; 10:33,1.2[Ex-155#]; 11:5,1.2[Ex-158]; 11:19,2.1[Ex-164]; 12:13,1.2[Ex-169$]; 14:39,1.2[Ex-155#]; 15:14,2.2[Ex-158]; 15:28,1.2[Ex-164]; 15:54,3.4[Ex-169$]; 16:8,1.2[Ex-169$]; 16:17,1.1[Ex-158]; 16:19,3.2[Ex-164]; 16:24,1.1[Ex-164]; Count = 32

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-154 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-161; (2) Ex-169$; (3) Ex-166#; (4) Ex-155#; (5) Ex-168$;

Primary Descendants: (1) 01\*; (2) 01^1%; (3) C\*%; (4) C^1%; (5) C^2%; (6) C^3%; (7) Ex-153;

Secondary Descendants: (1) l^249; (2) 6; (3) D06\*; (4) D06^2; (5) F\*; (6) G012\*; (7) G012^c; (8) sy^p%; (9) it-ar; (10) Pel%;

The Variants in the Sibling Gene:

2.2; 84.1; 88.2; 128.2; 146.2; 154.1; 248.2; 254.2; 264.1; 354.2; 372.2; 397.2; 401.1; 407.2; 414.1; 440.2; Total = 16

Variants different from Parent[1]: 3:12,2.2[Ex-169$]; 5:11,1.2[Ex-169$]; 6:7,1.2[Ex-169$]; 8:3,2.2[Ex-169$]; 8:8,1.2[Ex-169$]; 10:9,2.2[Ex-168$]; 10:10,1.2[Ex-169$]; 10:16,2.2[Ex-166#]; 12:10,4.2[Ex-166#]; 12:25,1.2[Ex-155#]; 14:6,1.2[Ex-168$]; 14:25,3.2[Ex-169$]; 15:10,2.2[Ex-166#]; Count = 13

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-155# \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Autograph; (2) Ex-172$;

Primary Descendants: (1) 01^2; (2) 01^c%; (3) H015\*%; (4) H015^c%; (5) it-t%; (6) Ex-152;

Secondary Descendants: (1) it-b\*; (2) Ex-161; (3) Ex-150; (4) C^3%; (5) D06^c%; (6) D06^1; (7) sa^a%; (8) Ex-153; (9) C^1%; (10) C^2%; (11) 630%; (12) 0289%; (13) Ex-147; (14) C\*%; (15) D06\*; (16) F\*; (17) G012\*; (18) G012^c; (19) 0285%; (20) 33\*; (21) vg^b; (22) vg^cl; (23) 01^1%; (24) 048%; (25) Eus^a%; (26) Eus^b%; (27) it-ar; (28) Ambst%; (29) Epiph^a%; (30) Epiph^b%; (31) 104\*%; (32) 81\*%; (33) 1175\*%; (34) 1175^c%; (35) 1505\*%; (36) sa^b%; (37) bo^a%; (38) bo^b%; (39) Irlat^a%; (40) P025\*%; (41) 1739\*; (42) NA-27; (43) Ex-160; (44) 1739^c; (45) 0201%; (46) 2464\*%; (47) Ex-154; (48) K\*%; (49) 0243^c%; (50) it-g%; (51) 365%;

The Variants in the Sibling Gene:

2.2; 4.2; 25.2; 33.2; 35.2; 49.2; 56.1; 58.2; 59.2; 63.2; 78.2; 79.2; 82.2; 90.2; 96.2; 99.2; 100.2; 104.2; 140.2; 143.2; 144.2; 145.2; 151.2; 153.2; 169.1; 177.2; 180.2; 182.2; 185.2; 186.2; 200.2; 223.2; 224.2; 226.2; 231.2; 237.2; 238.2; 239.2; 248.2; 260.2; 271.2; 272.2; 290.1; 291.1; 304.2; 306.2; 311.2; 313.2; 321.1; 322.2; 324.2; 329.2; 332.2; 340.2; 341.2; 347.2; 356.2; 359.2; 366.2; 370.2; 400.2; 409.2; 433.1; 445.1; 447.2; 448.2; Total = 66

Variants different from Parent[1]: 1:1,2.2; 1:2,2.2[Ex-172$]; 1:20,1.2[Ex-172$]; 2:1,1.2[Ex-172$]; 2:4,1.2[Ex-172$]; 2:15,1.2[Ex-172$]; 3:4,1.3; 3:5,1.2[Ex-172$]; 3:5,2.2[Ex-172$]; 3:10,2.2; 4:6,2.2; 4:9,1.2[Ex-172$]; 4:13,1.2[Ex-172$]; 5:1,1.2; 5:5,1.2[Ex-172$]; 5:7,1.2[Ex-172$]; 5:7,2.2; 5:10,1.2; 7:5,2.2; 7:7,1.2[Ex-172$]; 7:7,2.2[Ex-172$]; 7:7,3.2[Ex-172$]; 7:13,4.2[Ex-172$]; 7:14,2.2; 7:31,1.3; 7:35,2.2; 7:37,1.2; 7:38,1.2; 7:38,4.2; 7:39,1.2; 8:4,1.2; 9:10,1.2[Ex-172$]; 9:12,1.2[Ex-172$]; 9:13,2.2; 9:18,1.2[Ex-172$]; 9:21,3.2[Ex-172$]; 9:21,4.2; 9:22,1.2; 10:8,1.2; 10:13,4.2; 10:23,1.2; 10:23,2.2; 11:17,1.1[Ex-172$]; 11:17,2.1[Ex-172$]; 11:24,4.2; 11:26,1.2[Ex-172$]; 11:31,1.2; 11:34,1.2[Ex-172$]; 12:6,2.3; 12:9,1.2[Ex-172$]; 12:9,3.2[Ex-172$]; 12:10,5.2[Ex-172$]; 12:12,1.2; 12:24,2.2[Ex-172$]; 12:25,1.2; 13:2,1.2[Ex-172$]; 13:11,1.2; 14:2,1.2[Ex-172$]; 14:10,1.2; 14:13,1.2; 14:38,1.2[Ex-172$]; 15:6,1.2[Ex-172$]; 15:47,1.3[Ex-172$]; 15:54,3.3[Ex-172$]; 16:2,1.2; 16:2,2.2[Ex-172$]; Count = 66

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-156 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-160; (2) Ex-168$; (3) Ex-169$;

Primary Descendants: (1) it-ar; (2) it-b\*; (3) D06\*; (4) F\*; (5) G012\*; (6) G012^c; (7) Ambst%; (8) Cyp^a%; (9) McionE%; (10) Pel%; (11) Spec%;

Secondary Descendants: (1) 6; (2) sy^p%;

The Variants in the Sibling Gene:

12.1; 17.1; 18.1; 23.1; 30.1; 31.1; 93.1; 173.1; 180.1; 192.1; 225.1; 229.1; 279.1; 283.1; 289.1; 290.1; 291.1; 314.1; 319.1; 364.1; 430.1; Total = 21

Variants different from Parent[1]: 2:11,2.2; 3:13,1.2; 8:13,1.2[Ex-168$]; 8:13,2.2[Ex-168$]; 9:5,1.2[Ex-168$]; 12:2,2.2; 12:20,1.2[Ex-169$]; 14:19,1.4; 14:32,1.2[Ex-168$]; 14:34,1.2[Ex-168$]; 14:34,2.2[Ex-168$]; 14:37,1.3; 14:40,1.2[Ex-168$]; 15:2,1.2[Ex-168$]; 15:15,1.2[Ex-169$]; Count = 15

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-157 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-161; (2) Ex-169$; (3) Ex-168$; (4) Ex-166#; (5) Ex-170$;

Primary Descendants: (1) A\*; (2) A^c; (3) P^11%; (4) 0278%; (5) Irarm%; (6) Lcf%; (7) McionT%;

Secondary Descendants: (1) D06\*; (2) D06^2; (3) 326; (4) it-ar; (5) sy^p%; (6) C^1%; (7) C^2%; (8) C^3%; (9) F\*; (10) G012\*; (11) G012^c; (12) it-b\*; (13) 33\*; (14) 365%; (15) Ex-147; (16) 1881\*; (17) C\*%; (18) 629; (19) TR; (20) vg^cl; (21) Ex-150; (22) 614\*; (23) Ambst%;

The Variants in the Sibling Gene:

2.2; 84.2; 88.2; 128.2; 146.2; 154.2; 248.2; 254.2; 264.2; 354.2; 372.2; 397.2; 401.2; 407.2; 414.2; 440.2; Total = 16

Variants different from Parent[1]: 1:1,1.2[Ex-168$]; 1:14,1.3[Ex-169$]; 2:4,1.2[Ex-169$]; 2:9,1.2[Ex-168$]; 2:11,1.2[Ex-168$]; 3:17,2.2[Ex-168$]; 4:17,2.2[Ex-169$]; 5:4,1.2[Ex-168$]; 5:5,1.4[Ex-168$]; 6:1,1.2[Ex-168$]; 6:11,1.2[Ex-169$]; 6:14,1.3[Ex-169$]; 7:1,1.2[Ex-166#]; 7:10,1.2[Ex-168$]; 7:17,2.1[Ex-168$]; 7:34,3.2[Ex-168$]; 7:39,3.2[Ex-168$]; 8:11,1.2[Ex-168$]; 9:13,1.2[Ex-169$]; 9:15,1.2[Ex-168$]; 10:3,1.2[Ex-168$]; 10:4,1.2[Ex-168$]; 10:4,2.2[Ex-168$]; 10:9,1.3[Ex-169$]; 10:11,2.2[Ex-168$]; 10:27,2.2; 11:25,1.2[Ex-168$]; 11:32,1.2[Ex-168$]; 12:9,1.2[Ex-169$]; 12:10,5.2[Ex-169$]; 12:10,6.2[Ex-168$]; 12:13,2.3; 12:18,1.2[Ex-168$]; 12:21,1.2[Ex-166#]; 13:2,1.2[Ex-169$]; 14:2,1.2[Ex-168$]; 14:12,2.2[Ex-168$]; 14:15,2.2[Ex-168$]; 14:18,3.4; 14:34,5.2; 14:37,1.5[Ex-170$]; 15:25,1.2[Ex-168$]; 15:31,1.2[Ex-168$]; 15:34,1.2[Ex-168$]; 15:47,1.3[Ex-170$]; 15:51,1.2; 15:52,2.2[Ex-168$]; 15:54,1.3[Ex-169$]; 16:2,2.2[Ex-168$]; 16:17,2.2[Ex-166#]; 16:19,1.2; 16:23,1.2[Ex-168$]; Count = 52

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-158 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-164; (2) Ex-168$; (3) Ex-163; (4) Ex-162; (5) Ex-171$; (6) Ex-169$; (7) Ex-166#;

Primary Descendants: (1) B^c; (2) B^2; (3) I%; (4) 0270%; (5) Or^a%; (6) Ex-144;

Secondary Descendants: (1) C^3%; (2) Ex-147; (3) sy^p%; (4) Tert%; (5) Ex-153; (6) Ex-150; (7) C^1%; (8) C^2%; (9) G012\*; (10) G012^c; (11) 6; (12) 365%; (13) sy^h%; (14) D06^2; (15) D06\*; (16) F\*; (17) 945; (18) it-ar; (19) 01^1%; (20) Ambst%; (21) Spec%; (22) 33\*; (23) 629; (24) 326; (25) 630%; (26) TR; (27) 0243\*%; (28) 0243^c%; (29) 1739^c;

The Variants in the Sibling Gene:

3.1; 5.1; 9.1; 15.1; 19.1; 22.1; 34.1; 40.1; 52.1; 92.1; 123.1; 126.1; 139.1; 150.1; 183.1; 184.1; 201.1; 208.1; 209.1; 243.1; 290.2; 291.2; 293.1; 296.1; 320.1; 326.1; 327.1; 342.1; 351.2; 371.1; 374.1; 378.1; 383.1; 398.1; 400.1; 402.1; 403.1; 421.1; 422.1; 437.1; 439.1; 444.1; 446.1; 453.1; 456.1; 464.1; 469.1; Total = 47

Variants different from Parent[1]: 1:17,2.2[Ex-168$]; 1:28,1.2[Ex-163]; 2:1,1.2[Ex-168$]; 2:9,1.2[Ex-168$]; 2:13,2.2[Ex-168$]; 2:15,1.2[Ex-168$]; 2:16,1.2[Ex-168$]; 3:12,2.4[Ex-171$]; 3:16,1.2[Ex-168$]; 4:2,2.1[Ex-168$]; 4:13,1.2[Ex-169$]; 4:15,2.2[Ex-168$]; 4:17,2.2[Ex-169$]; 5:8,1.2; 5:11,2.1[Ex-168$]; 6:2,2.1[Ex-168$]; 6:5,1.2; 6:11,1.3[Ex-163]; 6:19,2.2[Ex-168$]; 7:5,4.2; 7:7,1.2[Ex-169$]; 7:28,2.2[Ex-168$]; 7:34,2.1[Ex-163]; 7:34,4.2[Ex-168$]; 7:40,2.2[Ex-168$]; 8:6,2.2; 9:7,2.2[Ex-163]; 9:16,2.1[Ex-163]; 10:13,3.2[Ex-168$]; 10:19,2.1[Ex-168$]; 10:20,1.1[Ex-168$]; 11:5,1.2[Ex-169$]; 11:23,2.2; 12:6,2.2[Ex-169$]; 12:18,1.2[Ex-168$]; 12:19,1.2[Ex-168$]; 12:20,1.2[Ex-169$]; 13:4,1.2[Ex-163]; 13:8,2.2; 14:7,1.2[Ex-169$]; 14:8,1.2[Ex-163]; 14:16,2.1[Ex-168$]; 14:28,1.2[Ex-168$]; 15:7,1.1[Ex-168$]; 15:10,2.2[Ex-163]; 15:14,2.2[Ex-169$]; 15:17,1.2; 15:45,1.2[Ex-168$]; 15:49,1.1[Ex-168$]; 16:6,2.2[Ex-168$]; 16:17,1.1[Ex-168$]; Count = 51

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-159 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-163; (2) Ex-168$; (3) Ex-164;

Primary Descendants: (1) vg\*; (2) vg^a; (3) vg^cl; (4) vg^st; (5) Irlat^b%; (6) Meth%; (7) Tert%;

Secondary Descendants: (1) Ambst%; (2) Ex-147; (3) Ex-153;

The Variants in the Sibling Gene:

33.0; 94.1; 133.0; 210.0; 344.0; Total = 5

Variants different from Parent[1]: 6:14,1.1[Ex-168$]; 7:22,1.1[Ex-168$]; 10:17,1.1[Ex-168$]; 10:27,1.1[Ex-168$]; 11:19,2.1[Ex-168$]; Count = 5

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-160 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-162; (2) Ex-169$; (3) Ex-168$; (4) Ex-165#; (5) Ex-155#;

Primary Descendants: (1) it-d; (2) Ex-156;

Secondary Descendants: (1) C\*%; (2) Ex-147; (3) Lcf%; (4) TR; (5) sy^p%;

The Variants in the Sibling Gene:

24.1; 50.1; 54.1; 215.1; 223.1; 466.1; Total = 6

Variants different from Parent[1]: 1:11,1.2[Ex-169$]; 1:15,1.2[Ex-168$]; 1:16,1.2; 1:18,2.2[Ex-169$]; 1:28,1.1[Ex-168$]; 1:29,1.1[Ex-168$]; 5:3,1.2[Ex-169$]; 7:34,2.3[Ex-168$]; 7:37,1.3[Ex-169$]; 7:40,4.2[Ex-169$]; 9:13,1.2[Ex-169$]; 9:16,2.2[Ex-165#]; 10:29,1.2[Ex-168$]; 11:2,2.2; 11:15,1.2[Ex-169$]; 11:17,1.1[Ex-168$]; 11:17,2.1[Ex-168$]; 12:2,1.3[Ex-169$]; 12:3,3.2[Ex-168$]; 14:7,1.2[Ex-169$]; 15:37,1.2[Ex-169$]; Count = 21

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-161 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-165#; (2) Ex-155#; (3) Ex-168$; (4) Ex-169$;

Primary Descendants: (1) P025\*%; (2) 81\*%; (3) 104\*%; (4) 1175\*%; (5) 1175^c%; (6) 1505\*%; (7) 2464\*%; (8) Ex-157; (9) Ex-154;

Secondary Descendants: (1) l^249; (2) Ex-148; (3) 326; (4) 044\*; (5) 6; (6) F\*; (7) G012\*; (8) G012^c; (9) vg^b; (10) it-ar; (11) Ex-144; (12) 614\*; (13) D06^c%; (14) D06^2;

The Variants in the Sibling Gene:

16.2; 30.1; 31.1; 41.1; 64.1; 67.1; 75.2; 105.1; 108.2; 115.2; 148.2; 156.2; 204.1; 207.1; 210.1; 218.1; 227.1; 250.2; 255.1; 262.1; 266.2; 281.1; 309.1; 310.1; 343.2; 352.1; 376.1; 387.1; 403.1; 410.2; 424.2; 468.1; Total = 32

Variants different from Parent[1]: 1:1,2.2[Ex-155#]; 4:14,1.1[Ex-168$]; 4:17,1.2; 6:15,2.2; 7:9,1.2[Ex-169$]; 7:15,1.1[Ex-168$]; 10:8,1.2[Ex-155#]; 10:10,2.2[Ex-169$]; 10:18,1.1[Ex-168$]; 13:8,3.2[Ex-169$]; 14:15,1.2[Ex-168$]; 14:34,6.2; 14:39,1.1[Ex-168$]; 15:5,1.2[Ex-168$]; 15:14,1.1[Ex-168$]; 15:51,3.2[Ex-169$]; Count = 16

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-162 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-166#; (2) Ex-169$; (3) Ex-168$;

Primary Descendants: (1) it-f\*; (2) D06^c%; (3) it-r%; (4) Ir%; (5) Ptol^Ir%; (6) Ex-160;

Secondary Descendants: (1) Ex-158; (2) P^46^c; (3) P^46^1; (4) P^46^2; (5) Ex-151;

The Variants in the Sibling Gene:

77.1; 96.1; 123.1; 125.1; 126.1; 135.1; 136.1; 141.1; 152.1; 153.1; 159.1; 163.1; 170.1; 171.1; 173.1; 176.1; 195.1; 209.1; 219.1; 220.1; 229.1; 240.1; 257.1; 263.1; 265.1; 267.1; 269.1; 274.1; 276.1; 282.1; 289.1; 292.1; 296.1; 298.1; 302.1; 316.1; 318.1; 323.1; 326.1; 327.1; 328.1; 331.1; 338.1; 342.1; 345.1; 348.1; 349.1; 365.1; 367.1; 374.1; 377.1; 382.1; 395.1; 399.0; 407.1; 408.1; 412.1; 419.1; 421.1; 434.1; 440.0; 443.1; 458.1; 461.1; 465.1; Total = 65

Variants different from Parent[1]: 1:18,3.2[Ex-169$]; 2:16,1.2[Ex-168$]; 3:3,2.2[Ex-169$]; 9:1,1.2[Ex-169$]; 9:10,1.2[Ex-169$]; 16:19,5.2[Ex-168$]; Count = 6

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-163 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-166#; (2) Ex-168$; (3) Ex-169$;

Primary Descendants: (1) vg^b; (2) P^61%; (3) Cl^a%; (4) Cl^b%; (5) Did^a%; (6) Epiph^a%; (7) Epiph^b%; (8) Eus^a%; (9) Eus^b%; (10) Irlat^a%; (11) Ex-159;

Secondary Descendants: (1) Ex-158; (2) P^46^c; (3) P^46^1; (4) P^46^2; (5) 81\*%; (6) Ambst%; (7) Ex-151; (8) 1611; (9) 044\*; (10) sy^h%;

The Variants in the Sibling Gene:

77.0; 96.1; 123.0; 125.1; 126.0; 135.0; 136.0; 141.0; 152.0; 153.1; 159.0; 163.0; 170.1; 171.0; 173.1; 176.0; 195.0; 209.0; 219.0; 220.1; 229.1; 240.0; 257.0; 263.0; 265.0; 267.0; 269.0; 274.0; 276.0; 282.0; 289.1; 292.0; 296.0; 298.0; 302.0; 316.1; 318.1; 323.0; 326.0; 327.0; 328.0; 331.0; 338.0; 342.0; 345.0; 348.0; 349.0; 365.0; 367.0; 374.0; 377.1; 382.0; 395.0; 399.0; 407.1; 408.0; 412.0; 419.0; 421.0; 434.0; 440.0; 443.0; 458.0; 461.0; 465.0; Total = 65

Variants different from Parent[1]: 2:1,1.2[Ex-168$]; 5:4,1.3[Ex-169$]; 6:20,1.2[Ex-168$]; 8:11,1.4[Ex-169$]; 12:27,1.2[Ex-168$]; Count = 5

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-164 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Ex-165#; (2) Ex-168$; (3) Ex-166#; (4) Ex-169$;

Primary Descendants: (1) P^46^c; (2) P^46\*; (3) P^46^1; (4) P^46^2; (5) 0185%; (6) 0201%; (7) Or^b%; (8) Ex-158;

Secondary Descendants: (1) it-b\*; (2) Ambst%; (3) Ex-151; (4) G012\*; (5) G012^c; (6) 323\*; (7) Ex-150; (8) C^1%; (9) C^2%; (10) C^3%; (11) D06^2; (12) P025\*%; (13) 81\*%; (14) Ex-153; (15) 365%; (16) 1175\*%; (17) 1175^c%; (18) Cl^a%; (19) Cl^b%; (20) Spec%; (21) 1881\*; (22) 2464\*%; (23) 629; (24) Irlat^a%; (25) Ex-159; (26) sy^h%; (27) 630%; (28) 1505\*%; (29) sy^p%; (30) 01^1%; (31) D06\*; (32) Cyp^a%; (33) Tert%;

The Variants in the Sibling Gene:

16.1; 30.1; 31.1; 41.1; 64.1; 67.1; 75.1; 105.1; 108.1; 115.1; 148.1; 156.1; 204.1; 207.1; 210.1; 218.1; 227.1; 250.1; 255.1; 262.1; 266.1; 281.1; 309.1; 310.1; 343.1; 352.1; 376.2; 387.1; 403.1; 410.1; 424.1; 468.1; Total = 32

Variants different from Parent[1]: 1:2,1.2[Ex-168$]; 1:4,1.2[Ex-168$]; 1:8,3.2; 1:13,3.2[Ex-168$]; 1:17,1.2[Ex-168$]; 1:18,1.2[Ex-168$]; 2:2,1.1[Ex-168$]; 2:10,1.2[Ex-168$]; 3:2,1.2; 5:2,2.2[Ex-168$]; 6:10,1.2[Ex-166#]; 6:14,1.2[Ex-166#]; 7:5,1.2[Ex-168$]; 7:13,3.2[Ex-168$]; 7:38,2.2[Ex-168$]; 7:38,3.2[Ex-168$]; 8:6,1.2[Ex-168$]; 8:8,3.1[Ex-168$]; 8:10,1.2[Ex-166#]; 10:2,1.2[Ex-169$]; 11:17,1.3; 11:17,2.3; 11:19,2.1[Ex-168$]; 11:22,1.2[Ex-166#]; 12:6,1.2[Ex-168$]; 12:10,2.2[Ex-166#]; 12:10,3.2[Ex-166#]; 12:26,1.2[Ex-166#]; 13:5,2.3[Ex-169$]; 14:14,1.2[Ex-168$]; 14:15,3.2[Ex-166#]; 14:18,2.1[Ex-168$]; 14:23,1.2[Ex-168$]; 14:34,7.2[Ex-168$]; 14:38,1.2[Ex-168$]; 14:39,2.2[Ex-168$]; 14:39,3.4; 15:27,1.2[Ex-166#]; 15:28,1.2[Ex-168$]; 15:50,2.1[Ex-168$]; 15:51,2.1[Ex-168$]; 15:54,2.2[Ex-168$]; 15:54,4.2[Ex-168$]; 16:6,3.2[Ex-168$]; 16:10,1.2[Ex-168$]; 16:19,3.2[Ex-168$]; 16:24,1.1[Ex-168$]; Count = 47

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-165# \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Autograph; (2) Ex-172$;

Primary Descendants: (1) P^15%; (2) K\*%; (3) 048%; (4) 0199%; (5) 0222%; (6) 0285%; (7) 0289%; (8) NA-27; (9) it-g%; (10) sa^a%; (11) sa^b%; (12) bo^a%; (13) bo^b%; (14) Hier^b%; (15) Ex-164; (16) Ex-161;

Secondary Descendants: (1) Tert%; (2) Ex-160; (3) D06^c%; (4) D06^1; (5) it-e%; (6) it-r%; (7) Ex-151; (8) Cl^b%; (9) l^249; (10) D06^2; (11) F\*; (12) G012\*; (13) G012^c; (14) 6; (15) D06\*; (16) it-d; (17) 01^2; (18) L019\*%; (19) 614\*; (20) it-f\*; (21) vg^b; (22) Cl^a%; (23) Pel%; (24) it-b\*; (25) Ambst%; (26) 326; (27) Epiph^b%; (28) Ex-148; (29) 629;

The Variants in the Sibling Gene:

16.1; 30.1; 31.1; 41.1; 64.1; 67.1; 75.1; 105.1; 108.1; 115.1; 148.1; 156.1; 204.1; 207.1; 210.1; 218.1; 227.1; 250.1; 255.1; 262.1; 266.1; 281.1; 309.1; 310.1; 343.1; 352.1; 376.1; 387.1; 403.1; 410.1; 424.1; 468.1; Total = 32

Variants different from Parent[1]: 1:14,1.2; 1:28,1.1[Ex-172$]; 1:29,1.1[Ex-172$]; 2:10,2.1; 3:12,1.1; 3:13,2.1; 4:2,2.2; 5:10,2.1[Ex-172$]; 5:11,2.2[Ex-172$]; 6:2,2.2[Ex-172$]; 7:13,1.2[Ex-172$]; 7:17,2.2; 8:7,1.1; 8:8,2.1; 8:11,1.1; 9:7,1.1; 9:15,1.1; 10:9,1.2[Ex-172$]; 10:11,1.1[Ex-172$]; 10:16,2.1; 10:19,2.2[Ex-172$]; 10:33,1.1; 11:29,1.1; 11:29,2.1; 12:26,2.2; 13:8,1.1; 14:16,2.3[Ex-172$]; 14:26,1.1; 14:39,3.1[Ex-172$]; 15:7,1.2; 15:28,3.2; 16:23,1.1; Count = 32

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-166# \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Autograph; (2) Ex-172$;

Primary Descendants: (1) P^34%; (2) D06^1; (3) 088%; (4) 1241\*%; (5) it-e%; (6) BasA%; (7) Did^b%; (8) Hier^a%; (9) Hipp%; (10) McionA%; (11) Or^lat^a%; (12) Ex-163; (13) Ex-162;

Secondary Descendants: (1) Ex-164; (2) P025\*%; (3) 81\*%; (4) 104\*%; (5) 2464\*%; (6) bo^a%; (7) bo^b%; (8) Ex-158; (9) it-g%; (10) it-t%; (11) sa^b%; (12) Ex-152; (13) Ex-157; (14) sy^p%; (15) P^46^c; (16) P^46^1; (17) P^46^2; (18) 629; (19) 1175\*%; (20) 1175^c%; (21) 1505\*%; (22) NA-27; (23) sa^a%; (24) Ex-151; (25) Ex-153; (26) 044\*; (27) 33\*; (28) C^1%; (29) C^2%; (30) C^3%; (31) H015\*%; (32) H015^c%; (33) sy^h%; (34) Ex-150; (35) 01^2; (36) 0201%; (37) Ex-154; (38) Or^a%; (39) Or^b%; (40) D06^2; (41) Ex-148; (42) 945; (43) 01\*; (44) C\*%; (45) 0121%; (46) 0243\*%; (47) 0243^c%; (48) 1739\*;

The Variants in the Sibling Gene:

77.1; 96.1; 123.1; 125.1; 126.1; 135.1; 136.1; 141.1; 152.1; 153.1; 159.1; 163.1; 170.1; 171.1; 173.1; 176.1; 195.1; 209.1; 219.1; 220.1; 229.1; 240.1; 257.1; 263.1; 265.1; 267.1; 269.1; 274.1; 276.1; 282.1; 289.1; 292.1; 296.1; 298.1; 302.1; 316.1; 318.1; 323.1; 326.1; 327.1; 328.1; 331.1; 338.1; 342.1; 345.1; 348.1; 349.1; 365.1; 367.1; 374.1; 377.1; 382.1; 395.1; 399.0; 407.1; 408.1; 412.1; 419.1; 421.1; 434.1; 440.0; 443.1; 458.1; 461.1; 465.1; Total = 65

Variants different from Parent[1]: 4:6,1.2; 5:5,1.3; 6:10,1.2; 6:11,1.3; 6:14,1.2; 7:1,1.2; 7:2,1.2; 7:5,3.2[Ex-172$]; 7:14,1.2; 7:14,2.3; 7:17,5.2; 7:22,1.2; 7:31,2.3; 7:32,1.2; 7:34,2.1[Ex-172$]; 7:35,1.2[Ex-172$]; 8:2,2.2[Ex-172$]; 8:10,1.2; 9:7,2.2; 9:8,1.3; 9:16,2.1; 9:22,2.2; 10:13,1.2; 10:17,1.2; 10:19,1.2; 10:19,3.2; 10:20,2.2[Ex-172$]; 10:27,1.2; 10:28,1.2; 11:2,1.2; 11:15,1.3[Ex-172$]; 11:19,1.2; 11:22,1.2; 11:23,1.2; 11:24,2.2[Ex-172$]; 12:2,3.3; 12:3,2.3; 12:9,2.2[Ex-172$]; 12:10,2.2; 12:10,3.2; 12:10,4.2[Ex-172$]; 12:11,1.2[Ex-172$]; 12:21,1.2; 12:26,1.2; 12:31,1.2; 13:3,1.2; 13:4,1.2; 14:8,1.2; 14:11,1.2[Ex-172$]; 14:15,3.2; 14:18,1.3; 14:21,2.2[Ex-172$]; 14:34,4.2; 14:37,1.4; 15:5,1.3; 15:5,2.2; 15:10,2.2; 15:24,1.2; 15:27,1.2; 15:47,2.2; 15:51,3.4; 15:54,1.2[Ex-172$]; 16:15,1.2; 16:17,2.2; 16:19,4.2; Count = 65

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-168$ \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Autograph; (2) Ex-172$;

Primary Descendants: (1) P^61%; (2) D06^c%;

Secondary Descendants: (1) D06^1; (2) 81\*%; (3) D06^2; (4) 33\*; (5) D06\*; (6) Ex-164; (7) 01\*; (8) F\*; (9) 1175\*%; (10) 1175^c%; (11) sa^b%; (12) Eus^a%; (13) Eus^b%; (14) Ex-144; (15) D06^c%; (16) G012\*; (17) G012^c; (18) P^46\*; (19) P^46^c; (20) P^46^1; (21) P^46^2; (22) 326; (23) 2464\*%; (24) sa^a%; (25) sy^p%; (26) C\*%; (27) C^1%; (28) C^2%; (29) C^3%; (30) NA-27; (31) bo^b%; (32) it-g%; (33) Tert%; (34) Ex-152; (35) Ex-160; (36) 365%; (37) Ex-158; (38) P^11%; (39) 630%; (40) 1739\*; (41) 323\*; (42) vg^b; (43) Ambst%; (44) Cyp^a%; (45) Cl^a%; (46) Cl^b%; (47) Ex-151; (48) 629; (49) TR; (50) sy^h%; (51) 1505\*%; (52) Ex-150; (53) Ex-163; (54) Ex-157; (55) 6; (56) bo^a%; (57) L019\*%; (58) P025\*%; (59) 0289%; (60) 1506%; (61) pm^b; (62) Ex-147; (63) Ptol^Ir%; (64) 01^1%; (65) it-r%; (66) it-b\*; (67) it-f\*; (68) B^2; (69) 614\*; (70) l^249; (71) Ir%; (72) it-ar; (73) Epiph^b%; (74) McionE%; (75) l^846; (76) 1881^c; (77) 01^c%; (78) 01^2; (79) Ex-161; (80) 104\*%; (81) vg^cl; (82) 044\*; (83) vg^st; (84) Lcf%; (85) HF; (86) RP; (87) 048%; (88) Irlat^a%; (89) Ex-159; (90) Ex-153; (91) 1739^c; (92) 2495; (93) K\*%; (94) Spec%; (95) A^c; (96) P^15%; (97) Did^a%; (98) it-t%; (99) Epiph^a%; (100) it-d; (101) Or^a%; (102) Ex-156; (103) Irarm%; (104) it-e%; (105) 0285%; (106) 0243\*%; (107) Ex-154; (108) Pel%; (109) I%; (110) 945; (111) Ex-148; (112) A\*; (113) 0243^c%; (114) 075%; (115) 088%; (116) 0121%; (117) l^1575; (118) Ex-162; (119) P^61%; (120) Meth%; (121) Irlat^b%; (122) 2138; (123) 0270%; (124) McionT%; (125) 69;

The Variants in the Sibling Gene:

1.1; 3.1; 4.1; 5.1; 6.1; 7.1; 8.1; 10.1; 11.1; 13.1; 14.1; 15.1; 17.1; 19.1; 20.1; 21.1; 22.1; 25.1; 26.1; 27.1; 28.1; 29.1; 30.2; 31.2; 32.1; 33.1; 34.2; 36.1; 37.1; 38.1; 39.1; 40.1; 42.1; 44.1; 45.1; 47.1; 48.1; 49.1; 50.1; 51.1; 53.1; 55.1; 56.1; 57.1; 58.1; 59.1; 61.1; 62.1; 68.1; 69.1; 70.1; 71.1; 72.1; 73.1; 76.1; 83.1; 84.2; 85.1; 86.1; 87.1; 92.1; 94.1; 95.1; 96.2; 97.1; 99.1; 102.1; 105.2; 110.1; 111.1; 112.1; 113.1; 117.1; 118.1; 119.1; 121.1; 127.1; 129.1; 130.1; 131.1; 132.1; 133.1; 137.1; 139.1; 141.1; 147.1; 148.1; 150.1; 151.1; 154.2; 155.1; 160.1; 161.1; 162.1; 165.1; 166.1; 167.1; 168.1; 169.1; 172.2; 173.2; 174.1; 175.1; 176.1; 179.1; 183.1; 184.1; 186.2; 188.1; 189.1; 190.1; 191.1; 193.1; 195.1; 196.1; 198.1; 201.1; 203.1; 205.1; 208.2; 210.1; 211.1; 212.1; 213.1; 214.1; 216.1; 217.1; 220.1; 221.1; 222.2; 227.1; 228.1; 229.2; 232.1; 234.1; 237.1; 242.1; 244.1; 245.1; 246.1; 249.1; 250.1; 251.1; 252.1; 255.1; 256.1; 258.1; 259.1; 261.1; 264.2; 268.2; 269.1; 270.1; 277.1; 279.1; 280.1; 286.1; 287.1; 290.2; 291.2; 293.2; 294.1; 295.2; 297.1; 298.2; 300.1; 302.1; 303.1; 305.1; 306.1; 308.1; 312.1; 313.1; 314.1; 317.1; 319.1; 320.1; 323.1; 324.1; 325.1; 328.1; 330.1; 331.1; 334.1; 335.1; 336.1; 339.1; 340.1; 344.1; 346.1; 348.2; 350.1; 355.1; 357.1; 358.1; 359.1; 360.1; 361.1; 363.1; 367.1; 368.1; 369.1; 371.1; 372.1; 373.1; 375.1; 377.1; 378.2; 379.2; 380.2; 381.1; 382.1; 383.1; 384.1; 385.1; 388.1; 389.2; 390.1; 391.1; 392.1; 393.1; 394.1; 398.1; 400.1; 401.2; 402.1; 403.2; 404.1; 405.1; 406.1; 407.1; 409.1; 411.1; 413.1; 414.2; 420.1; 422.1; 423.1; 426.1; 428.1; 429.1; 431.1; 432.1; 435.2; 436.1; 437.2; 439.2; 441.1; 442.1; 443.1; 444.1; 445.1; 446.1; 448.1; 449.1; 450.1; 451.1; 452.1; 453.1; 456.1; 457.1; 459.2; 460.2; 463.1; 464.1; 466.1; 467.1; 469.2; Total = 268

Variants different from Parent[1]: 1:1,1.2; 1:2,1.2; 1:2,2.2[Ex-172$]; 1:4,1.2; 1:6,1.2; 1:8,1.2; 1:8,2.2; 1:9,1.2; 1:10,1.2; 1:13,1.2; 1:13,2.2; 1:13,3.2; 1:15,1.2; 1:17,1.2; 1:17,2.2; 1:17,3.2; 1:18,1.2; 1:20,1.2[Ex-172$]; 1:22,1.2; 1:23,1.2; 1:24,1.2; 1:26,1.2; 1:28,1.1[Ex-172$]; 1:29,1.1[Ex-172$]; 1:30,1.2; 2:1,1.2[Ex-172$]; 2:2,1.1; 2:4,2.2; 2:8,1.2; 2:8,2.2; 2:9,1.2; 2:10,1.2; 2:11,1.2; 2:12,1.2; 2:12,2.2; 2:13,2.2; 2:14,1.2; 2:15,1.2[Ex-172$]; 2:16,1.2[Ex-172$]; 3:1,1.2; 3:3,1.2; 3:3,3.2; 3:4,1.2; 3:4,2.2; 3:5,1.2[Ex-172$]; 3:5,2.2[Ex-172$]; 3:5,4.2; 3:10,1.2; 3:14,1.2; 3:16,1.2; 3:17,1.2; 3:17,2.2; 3:18,1.2; 3:20,1.2; 4:5,1.2; 4:13,2.2; 4:14,1.1; 4:15,1.2; 4:15,2.2; 4:16,1.2; 5:2,2.2; 5:4,1.2; 5:4,2.2; 5:5,1.4; 5:6,1.2; 5:7,1.2[Ex-172$]; 5:8,2.2; 5:10,2.1[Ex-172$]; 5:12,2.2; 5:13,1.2; 5:13,2.2; 6:1,1.2; 6:5,2.2; 6:5,3.2; 6:5,4.2; 6:7,2.2; 6:15,1.2[Ex-172$]; 6:15,3.2; 6:16,1.2; 6:19,1.2; 6:19,2.2; 6:20,1.2; 7:2,2.2; 7:5,1.2; 7:5,3.2[Ex-172$]; 7:10,1.2; 7:13,1.2[Ex-172$]; 7:13,3.2; 7:13,4.2[Ex-172$]; 7:15,1.1; 7:17,1.2; 7:18,1.2; 7:20,1.2; 7:21,1.2; 7:28,1.2; 7:28,2.2; 7:29,1.2; 7:29,2.2; 7:31,1.2; 7:34,1.4[Ex-172$]; 7:34,2.3; 7:34,3.2; 7:34,4.2; 7:35,1.2[Ex-172$]; 7:36,1.2; 7:38,2.2; 7:38,3.2; 7:39,1.3; 7:39,3.2; 7:40,1.2; 7:40,2.2; 7:40,3.2; 8:1,1.2; 8:2,2.2[Ex-172$]; 8:2,3.2; 8:3,1.2; 8:6,1.2; 8:6,3.2; 8:7,2.2; 8:8,3.1; 8:11,1.2; 8:11,2.2; 8:12,1.2; 8:13,1.2; 8:13,2.2; 9:2,1.2; 9:5,1.2; 9:8,1.2; 9:9,1.2; 9:9,2.1; 9:15,1.2; 9:16,1.2; 9:16,2.3; 9:18,2.2; 9:20,2.2; 9:21,3.2[Ex-172$]; 9:25,1.2; 10:3,1.2; 10:4,1.2; 10:4,2.2; 10:8,2.2; 10:9,1.2[Ex-172$]; 10:9,2.2; 10:9,3.2; 10:11,1.2; 10:11,2.2; 10:13,2.2; 10:13,3.2; 10:16,1.2[Ex-172$]; 10:18,1.1; 10:20,1.1; 10:20,2.2[Ex-172$]; 10:20,3.2; 10:28,2.2; 10:29,1.2; 10:31,1.2; 11:9,1.2; 11:10,1.2; 11:17,1.1[Ex-172$]; 11:17,2.1[Ex-172$]; 11:19,2.1; 11:19,3.2; 11:20,1.3; 11:22,2.2; 11:23,1.3; 11:23,3.2; 11:24,2.2[Ex-172$]; 11:24,3.2; 11:25,1.2; 11:26,1.2[Ex-172$]; 11:27,2.2; 11:32,1.2; 11:34,1.2[Ex-172$]; 12:2,1.2; 12:3,1.2; 12:3,3.2; 12:6,1.2; 12:9,2.2[Ex-172$]; 12:9,3.2[Ex-172$]; 12:10,1.2; 12:10,4.2[Ex-172$]; 12:10,6.2; 12:11,1.2[Ex-172$]; 12:13,2.2; 12:18,1.2; 12:19,1.2; 12:24,1.2; 12:24,2.2[Ex-172$]; 12:27,1.2; 12:31,2.2; 13:3,1.3; 13:5,1.2; 13:10,1.2; 13:12,1.2; 13:13,1.2; 14:2,1.2[Ex-172$]; 14:2,2.2; 14:4,1.2; 14:6,1.2; 14:11,1.2[Ex-172$]; 14:12,1.2; 14:12,2.2; 14:14,1.2; 14:15,1.2; 14:15,2.2; 14:16,1.2; 14:18,1.2; 14:18,2.1; 14:18,3.3; 14:19,1.3[Ex-172$]; 14:21,1.2; 14:21,2.2[Ex-172$]; 14:23,1.2; 14:25,1.2; 14:25,2.2; 14:28,1.2; 14:31,1.4; 14:32,1.2; 14:33,1.2; 14:34,1.2; 14:34,2.2; 14:34,3.2; 14:34,7.2; 14:38,1.2[Ex-172$]; 14:39,1.1; 14:39,2.2; 14:39,3.3; 14:40,1.2; 15:2,1.2; 15:3,1.2; 15:5,1.2; 15:6,1.2[Ex-172$]; 15:10,1.2; 15:12,1.2[Ex-172$]; 15:14,1.1; 15:25,1.2; 15:28,1.2; 15:28,2.2; 15:31,1.2; 15:31,3.2; 15:34,1.2; 15:45,1.2; 15:45,2.2; 15:49,1.1; 15:50,1.2[Ex-172$]; 15:50,2.1; 15:51,2.1; 15:52,1.2; 15:52,2.2; 15:54,1.2[Ex-172$]; 15:54,2.2; 15:54,3.2; 15:54,4.2; 16:2,2.2[Ex-172$]; 16:3,1.2; 16:4,1.2; 16:6,1.2; 16:6,2.2; 16:6,3.2; 16:10,1.2; 16:12,1.2; 16:15,2.3; 16:17,1.1; 16:19,2.2[Ex-172$]; 16:19,3.2; 16:19,5.2[Ex-172$]; 16:22,1.2; 16:24,1.1; Count = 268

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-169$ \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Autograph; (2) Ex-172$;

Primary Descendants: (1) P^46\*; (2) P^46^c;

Secondary Descendants: (1) P^46^1; (2) P^46^2; (3) P^46\*; (4) P^46^c; (5) 104\*%; (6) Ex-160; (7) 33\*; (8) 81\*%; (9) vg^b; (10) Ex-157; (11) it-r%; (12) 6; (13) it-g%; (14) it-t%; (15) Ex-162; (16) Ex-147; (17) Ex-152; (18) C\*%; (19) D06^1; (20) P025\*%; (21) 01^c%; (22) 01^2; (23) 1175\*%; (24) 1175^c%; (25) Ex-150; (26) Ex-151; (27) 945; (28) Ex-149; (29) Ex-153; (30) Ex-158; (31) sa^a%; (32) sa^b%; (33) bo^a%; (34) bo^b%; (35) Ex-163; (36) B^2; (37) D06\*; (38) Ex-154; (39) Cyp^a%; (40) 1505\*%; (41) Irarm%; (42) F\*; (43) G012\*; (44) 01\*; (45) 2495; (46) it-d; (47) Irlat^a%; (48) C^3%; (49) Ex-161; (50) 044\*; (51) 629; (52) D06^c%; (53) D06^2; (54) G012^c; (55) Tert%; (56) Cl^a%; (57) Cl^b%; (58) 1881\*; (59) Or^a%; (60) Or^b%; (61) 365%; (62) L019\*%; (63) 614\*; (64) 326; (65) Ex-164; (66) C^1%; (67) C^2%; (68) H015^c%; (69) I%; (70) Ambst%; (71) 2464\*%; (72) it-f\*; (73) Ex-156; (74) sy^h%; (75) it-ar; (76) it-b\*; (77) Epiph^a%; (78) Epiph^b%; (79) Pel%; (80) 630%; (81) McionA%; (82) Irlat^b%; (83) McionT%; (84) 0243^c%; (85) Hier^a%; (86) 075%; (87) Ex-146; (88) P^11%; (89) P^15%; (90) 1739\*; (91) TR; (92) HF; (93) RP;

The Variants in the Sibling Gene:

7.1; 12.0; 16.1; 23.0; 24.0; 34.1; 35.0; 46.0; 49.0; 54.0; 60.0; 65.0; 74.0; 79.0; 81.0; 82.0; 89.0; 93.0; 94.1; 96.0; 106.0; 107.0; 108.0; 109.0; 114.0; 115.0; 120.0; 124.0; 125.0; 126.1; 129.1; 133.1; 134.0; 143.0; 144.0; 145.0; 146.0; 147.1; 157.1; 158.1; 163.1; 172.0; 173.0; 180.1; 187.0; 192.0; 199.0; 206.0; 210.0; 211.1; 215.0; 221.1; 223.0; 224.0; 225.0; 227.1; 231.0; 233.0; 243.0; 250.1; 253.0; 254.0; 255.0; 266.0; 270.1; 278.0; 285.0; 288.0; 289.0; 290.0; 291.0; 301.0; 304.0; 307.0; 314.1; 316.0; 318.0; 321.0; 322.0; 324.1; 329.0; 333.0; 337.0; 347.0; 348.0; 349.1; 351.1; 354.0; 357.0; 362.1; 364.0; 376.0; 377.0; 380.0; 386.0; 399.0; 403.0; 411.1; 415.0; 416.0; 425.0; 427.0; 430.0; 433.0; 437.1; 440.0; 443.1; 445.0; 453.1; 454.0; 455.0; 458.1; 467.1; 469.1; Total = 114

Variants different from Parent[1]: 1:8,1.3; 1:11,1.2; 1:14,1.3; 1:18,2.2; 1:18,3.2; 2:2,1.3; 2:4,1.2[Ex-172$]; 2:13,1.2; 2:15,1.5; 3:3,2.2; 3:5,3.2; 3:12,2.2; 4:2,1.2; 4:9,1.2[Ex-172$]; 4:11,1.2; 4:13,1.2[Ex-172$]; 4:17,2.2; 5:3,1.2; 5:4,1.3; 5:5,1.2[Ex-172$]; 5:10,3.2; 5:11,1.2; 5:11,2.2[Ex-172$]; 5:12,1.2; 6:2,1.2; 6:2,2.2[Ex-172$]; 6:7,1.2; 6:10,2.2; 6:11,1.2; 6:14,1.3; 6:15,3.3; 6:20,1.3; 6:20,2.2; 7:7,1.2[Ex-172$]; 7:7,2.2[Ex-172$]; 7:7,3.2[Ex-172$]; 7:9,1.2; 7:10,1.3; 7:17,3.3; 7:17,4.3; 7:22,1.3; 7:34,1.2; 7:34,2.1[Ex-172$]; 7:37,1.3; 7:39,2.2; 7:40,4.2; 8:3,2.2; 8:8,1.2; 8:11,1.4[Ex-172$]; 8:11,2.3; 9:1,1.2; 9:9,1.3; 9:10,1.2[Ex-172$]; 9:12,1.2[Ex-172$]; 9:13,1.2; 9:15,1.3; 9:18,1.2[Ex-172$]; 9:20,1.2; 10:2,1.2; 10:9,1.3; 10:10,1.2; 10:10,2.2; 10:11,1.1[Ex-172$]; 10:19,2.2[Ex-172$]; 10:20,3.3; 10:28,3.2; 11:5,1.2; 11:14,1.2; 11:15,1.2; 11:17,1.4; 11:17,2.4; 11:24,1.2; 11:24,4.4; 11:27,1.2; 12:2,1.3; 12:2,3.2; 12:3,2.2; 12:6,2.2; 12:9,1.2[Ex-172$]; 12:9,3.3; 12:10,5.2[Ex-172$]; 12:13,1.2; 12:20,1.2; 13:2,1.2[Ex-172$]; 13:3,1.4; 13:4,1.3; 13:5,2.3; 13:8,3.2; 13:12,1.4; 14:5,1.3; 14:7,1.2; 14:16,2.2; 14:18,1.4; 14:19,1.2; 14:25,3.2; 14:37,1.2; 14:39,3.1[Ex-172$]; 15:10,1.3; 15:14,2.2; 15:15,1.2; 15:29,1.2; 15:31,2.2; 15:37,1.2; 15:47,1.2; 15:50,2.3; 15:51,3.2; 15:54,1.3; 15:54,3.4; 16:6,3.3; 16:7,1.2; 16:8,1.2; 16:15,1.3; 16:22,1.3; 16:24,1.3; Count = 114

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-170$ \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Autograph; (2) Ex-172$;

Primary Descendants: (1) P^46\*; (2) P^46^c;

Secondary Descendants: (1) P^46^1; (2) P^46^2; (3) P^46\*; (4) P^46^c; (5) D06\*; (6) F\*; (7) G012\*; (8) G012^c; (9) 01\*; (10) 01^c%; (11) 01^1%; (12) 01^2; (13) 629; (14) sa^a%; (15) C\*%; (16) C^1%; (17) C^2%; (18) C^3%; (19) D06^c%; (20) D06^1; (21) D06^2; (22) it-ar; (23) 0243\*%; (24) 0243^c%; (25) 048%; (26) it-d; (27) Ex-150; (28) Ex-157; (29) A^c;

The Variants in the Sibling Gene:

35.0; 65.0; 89.0; 94.0; 172.0; 210.0; 231.0; 289.0; 362.0; 376.0; 380.0; 399.0; 433.0; 440.0; 445.0; Total = 15

Variants different from Parent[1]: 2:4,1.5; 3:12,2.3; 4:17,2.3; 5:4,1.4; 7:34,1.4[Ex-172$]; 8:11,1.4[Ex-172$]; 9:18,1.3; 11:15,1.3[Ex-172$]; 14:5,1.5; 14:16,2.3[Ex-172$]; 14:19,1.3[Ex-172$]; 14:37,1.5; 15:47,1.3[Ex-172$]; 15:51,3.3; 15:54,3.3[Ex-172$]; Count = 15

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-171$ \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Autograph;

Primary Descendants: (1) 0289%; (2) Cl^a%;

Secondary Descendants: (1) Cl^b%; (2) Ex-158; (3) P^46\*; (4) P^46^c; (5) P^46^1; (6) P^46^2; (7) HF; (8) RP;

The Variants in the Sibling Gene:

65.0; 433.0; Total = 2

Variants different from Parent[1]: 3:12,2.4; 15:47,1.4; Count = 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\* Ms Ex-172$ \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Parents: (1) Autograph;

Primary Descendants:

Secondary Descendants: (1) Ex-155#; (2) Ex-165#; (3) Ex-168$; (4) Ex-169$; (5) Ex-166#; (6) Ex-170$;

The Variants in the Sibling Gene:

4.0; 25.0; 30.0; 31.0; 33.0; 35.0; 49.0; 50.0; 58.0; 59.0; 79.0; 82.0; 96.0; 99.0; 105.0; 108.0; 115.0; 127.0; 141.0; 143.0; 144.0; 145.0; 148.0; 151.0; 172.2; 173.0; 176.0; 195.0; 210.2; 223.0; 224.0; 231.0; 237.0; 250.0; 255.0; 261.0; 266.0; 269.0; 289.0; 290.0; 291.0; 302.0; 306.0; 313.0; 322.0; 323.0; 324.0; 328.0; 329.0; 331.0; 340.0; 347.0; 359.0; 367.0; 376.0; 380.0; 382.0; 400.0; 403.0; 409.0; 413.0; 433.0; 436.0; 443.0; 445.0; 448.0; 463.0; 466.0; Total = 68

Variants different from Parent[1]: 1:2,2.2; 1:20,1.2; 1:28,1.1; 1:29,1.1; 2:1,1.2; 2:4,1.2; 2:15,1.2; 2:16,1.2; 3:5,1.2; 3:5,2.2; 4:9,1.2; 4:13,1.2; 5:5,1.2; 5:7,1.2; 5:10,2.1; 5:11,2.2; 6:2,2.2; 6:15,1.2; 7:5,3.2; 7:7,1.2; 7:7,2.2; 7:7,3.2; 7:13,1.2; 7:13,4.2; 7:34,1.4; 7:34,2.1; 7:35,1.2; 8:2,2.2; 8:11,1.4; 9:10,1.2; 9:12,1.2; 9:18,1.2; 9:21,3.2; 10:9,1.2; 10:11,1.1; 10:16,1.2; 10:19,2.2; 10:20,2.2; 11:15,1.3; 11:17,1.1; 11:17,2.1; 11:24,2.2; 11:26,1.2; 11:34,1.2; 12:9,1.2; 12:9,2.2; 12:9,3.2; 12:10,4.2; 12:10,5.2; 12:11,1.2; 12:24,2.2; 13:2,1.2; 14:2,1.2; 14:11,1.2; 14:16,2.3; 14:19,1.3; 14:21,2.2; 14:38,1.2; 14:39,3.1; 15:6,1.2; 15:12,1.2; 15:47,1.3; 15:50,1.2; 15:54,1.2; 15:54,3.3; 16:2,2.2; 16:19,2.2; 16:19,5.2; Count = 68

End of Report.