

**Supplementary Table 10**

**Detail of CNVs detected in each case by whole genome sequencing.**

| Patient | chro | Start    | End      | Ref | Alt | GeneName   | Func       | Gene       | GeneDetail  | Exonic | Fun | AAChange | Gencode   | cpGIsland   | E | cytoBand   |
|---------|------|----------|----------|-----|-----|------------|------------|------------|-------------|--------|-----|----------|-----------|-------------|---|------------|
| ACa01   | 1    | 85860000 | 85870000 |     | 0   | DDAH1      | intronic   | NM_001113. |             | .      | .   |          | ENST0000. |             |   | 1p22.3     |
| ACa01   | 1    | 2.32E+08 | 2.32E+08 |     | 0   | TSNAX-DI   | exonic     | NM_00101.  |             | .      | .   |          | ENST0000. |             |   | 1q42.2     |
| ACa01   | 2    | 30810000 | 30830000 |     | 0   | LCLAT1     | intronic   | NM_00100.  |             | .      | .   |          | ENST0000. |             |   | 2p23.1     |
| ACa01   | 2    | 63400000 | 63410000 |     | 0   | WDPCP      | exonic     | NM_00104.  |             | .      | .   |          | ENST0000. |             |   | 2p15       |
| ACa01   | 2    | 1.61E+08 | 1.61E+08 |     | 0   | ITGB6      | exonic     | NM_00088.  |             | .      | .   |          | ENST0000. |             |   | 2q24.2     |
| ACa01   | 2    | 1.98E+08 | 1.98E+08 |     | 0   | RFTN2      | exonic     | NM_14462.  |             | .      | .   |          | ENST0000. |             |   | 2q33.1     |
| ACa01   | 3    | 0        | 230000   |     | 0   | .          | ncRNA_ex   | NR_11082.  |             | .      | .   |          | ENST0000. |             |   | 3p26.3     |
| ACa01   | 3    | 230000   | 32240000 |     | 0   | C3orf83,LI | exonic     | NM_00006.  |             | .      | .   |          | ENST0000  | CpG: 22,C   |   | 3p25.2-p25 |
| ACa01   | 3    | 32240000 | 32280000 |     | 0   | .          | upstream   | NM_17886.  |             | .      | .   |          | ENST0000  | CpG: 118    |   | 3p22.3     |
| ACa01   | 3    | 32280000 | 33270000 |     | 0   | CMTM7,CI   | exonic     | NM_00040.  |             | .      | .   |          | ENST0000  | CpG: 118,(3 |   | 3p22.3     |
| ACa01   | 3    | 33270000 | 33310000 |     | 0   | .          | intergenic | NM_01555   | dist=9293;1 | .      | .   |          |           |             |   | 3p22.3     |
| ACa01   | 3    | 33310000 | 33360000 |     | 0   | FBXL2      | exonic     | NM_00117.  |             | .      | .   |          | ENST0000  | CpG: 60     |   | 3p22.3     |
| ACa01   | 3    | 33360000 | 49040000 |     | 0   | ATRIP,AC   | exonic     | NM_00009.  |             | .      | .   |          | ENST0000  | CpG: 104,(3 |   | 3p22.1-p21 |
| ACa01   | 4    | 5980000  | 48550000 |     | 0   | TLR1,NKX   | exonic     | NM_00008.  |             | .      | .   |          | ENST0000  | CpG: 181,(4 |   | 4p15.32-p1 |
| ACa01   | 5    | 0        | 140000   |     | 0   | .          | upstream   | NM_05290.  |             | .      | .   |          | ENST0000  | CpG: 87,C   |   | 5p15.33    |
| ACa01   | 5    | 140000   | 31460000 |     | 0   | LOC40117   | exonic     | NM_00100.  |             | .      | .   |          | ENST0000  | CpG: 47,C   |   | 5p13.3-p15 |
| ACa01   | 5    | 31460000 | 41190000 |     | 0   | GOLPH3,L   | exonic     | NM_00006.  |             | .      | .   |          | ENST0000  | CpG: 187,(5 |   | 5p13.3-p13 |
| ACa01   | 5    | 41190000 | 43510000 |     | 0   | SEPP1,C5   | exonic     | NM_00006.  |             | .      | .   |          | ENST0000  | CpG: 116,(5 |   | 5p13.1-p12 |
| ACa01   | 5    | 43510000 | 43530000 |     | 0   | C5orf34,P/ | exonic     | NM_00645.  |             | .      | .   |          | ENST0000  | CpG: 17     |   | 5p12       |
| ACa01   | 5    | 43530000 | 43550000 |     | 0   | PAIP1      | exonic     | NM_00645.  |             | .      | .   |          | ENST0000. |             |   | 5p12       |
| ACa01   | 5    | 43550000 | 45700000 |     | 0   | FGF10-AS   | exonic     | NM_00446.  |             | .      | .   |          | ENST0000  | CpG: 139,(5 |   | 5p12       |
| ACa01   | 6    | 390000   | 57260000 |     | 0   | PSORS1C    | exonic     | NM_00006.  |             | .      | .   |          | ENST0000  | CpG: 96,C   |   | 6p24.1-p24 |
| ACa01   | 7    | 27700000 | 27710000 |     | 0   | HIBADH     | exonic     | NM_15274.  |             | .      | .   |          | ENST0000  | CpG: 66     |   | 7p15.2     |
| ACa01   | 7    | 43360000 | 43450000 |     | 0   | HECW1      | exonic     | NM_00128.  |             | .      | .   |          | ENST0000. |             |   | 7p13       |
| ACa01   | 7    | 1.07E+08 | 1.07E+08 |     | 0   | COG5       | exonic     | NM_00116.  |             | .      | .   |          | ENST0000. |             |   | 7q22.3     |
| ACa01   | 7    | 1.35E+08 | 1.35E+08 |     | 0   | CALD1      | exonic     | NM_00434.  |             | .      | .   |          | ENST0000. |             |   | 7q33       |
| ACa01   | 8    | 0        | 150000   |     | 0   | OR4F21     | exonic     | NM_00100.  |             | .      | .   |          | ENST0000  | CpG: 109    |   | 8p23.3     |
| ACa01   | 8    | 150000   | 170000   |     | 0   | RPL23AP5   | ncRNA_ex   | NR_00357.  |             | .      | .   |          | ENST0000. |             |   | 8p23.3     |
| ACa01   | 9    | 14630000 | 14640000 |     | 0   | ZDHC21     | exonic     | NM_17856.  |             | .      | .   |          | ENST0000. |             |   | 9p22.3     |
| ACa01   | 9    | 36820000 | 36830000 |     | 0   | MIR4475    | ncRNA_ex   | NR_03968.  |             | .      | .   |          | ENST0000. |             |   | 9p13.2     |
| ACa01   | 11   | 61340000 | 61350000 |     | 0   | SYT7       | exonic     | NM_00125.  |             | .      | .   |          | ENST0000  | CpG: 100    |   | 11q12.2    |
| ACa01   | 12   | 1.18E+08 | 1.18E+08 |     | 0   | TESC       | exonic     | NM_00116.  |             | .      | .   |          | ENST0000  | CpG: 108    |   | 12q24.22   |
| ACa01   | 13   | 25540000 | 25550000 |     | 0   | TPTE2P1    | ncRNA_ex   | NR_02673.  |             | .      | .   |          | ENST0000. |             |   | 13q12.13   |

|       |    |          |          |   |   |             |            |                       |   |                               |
|-------|----|----------|----------|---|---|-------------|------------|-----------------------|---|-------------------------------|
| ACa01 | 15 | 0        | 20160000 | 0 | 0 | .           | intergenic | NONE,NR_dist=NONE.    | . | ENST0000 CpG: 55,C 15p13-p11  |
| ACa01 | 15 | 20160000 | 21970000 | 0 | 0 | POTEB2,C    | exonic     | NM_00114.             | . | ENST0000 CpG: 81,C 15q11.2-q1 |
| ACa01 | 15 | 22670000 | 25310000 | 0 | 0 | SNORD11     | exonic     | NM_00100.             | . | ENST0000 CpG: 49,C 15q11.2    |
| ACa01 | 15 | 25310000 | 25410000 | 0 | 0 | SNORD11     | ncRNA_ex   | NR_00129.             | . | ENST0000. 15q11.2             |
| ACa01 | 15 | 25410000 | 30270000 | 0 | 0 | SNORD10     | exonic     | NM_00027.             | . | ENST0000 CpG: 32,C 15q13.1-q1 |
| ACa01 | 15 | 30270000 | 30370000 | 0 | 0 | .           | intergenic | NM_00130 dist=8998;1. | . | ENST0000 CpG: 45 15q13.2-q1   |
| ACa01 | 15 | 30370000 | 30390000 | 0 | 0 | GOLGA8J     | exonic     | NM_00128.             | . | ENST0000. 15q13.2             |
| ACa01 | 15 | 30390000 | 30520000 | 0 | 0 | DKFZP434    | ncRNA_ex   | NR_02677.             | . | ENST0000 CpG: 74,C 15q13.2    |
| ACa01 | 15 | 30520000 | 30650000 | 0 | 0 | .           | intergenic | NR_02677 dist=13257.  | . | ENST0000. 15q13.2             |
| ACa01 | 15 | 30650000 | 30890000 | 0 | 0 | ULK4P2,C    | exonic     | NM_00128.             | . | ENST0000 CpG: 73,C 15q13.2    |
| ACa01 | 15 | 30890000 | 32330000 | 0 | 0 | MTMR10,F    | exonic     | NM_00074.             | . | ENST0000 CpG: 18,C 15q13.2-q1 |
| ACa01 | 15 | 32330000 | 32390000 | 0 | 0 | CHRNA7      | intronic   | NM_00074.             | . | ENST0000. 15q13.3             |
| ACa01 | 15 | 32390000 | 32790000 | 0 | 0 | ULK4P1,U    | exonic     | NM_00074.             | . | ENST0000 CpG: 46,C 15q13.3    |
| ACa01 | 15 | 32790000 | 32810000 | 0 | 0 | .           | intergenic | NM_00127 dist=42165.  | . | . 15q13.3                     |
| ACa01 | 15 | 32810000 | 36950000 | 0 | 0 | GOLGA8A     | exonic     | NM_00102.             | . | ENST0000 CpG: 115,(15q13.3-q1 |
| ACa01 | 15 | 36950000 | 37020000 | 0 | 0 | C15orf41    | exonic     | NM_00113.             | . | ENST0000. 15q14               |
| ACa01 | 15 | 37020000 | 38640000 | 0 | 0 | MEIS2,C1t   | exonic     | NM_00113.             | . | ENST0000 CpG: 36,C 15q14      |
| ACa01 | 15 | 38640000 | 38800000 | 0 | 0 | RASGRP1     | exonic     | NM_00112.             | . | ENST0000 CpG: 42 15q14        |
| ACa01 | 15 | 38800000 | 64500000 | 0 | 0 | GANC,LDt    | exonic     | NM_00007.             | . | ENST0000 CpG: 31,C 15q21.1-q1 |
| ACa01 | 15 | 64500000 | 67630000 | 0 | 0 | MAP2K1,S    | exonic     | NM_00096.             | . | ENST0000 CpG: 89,C 15q22.33-c |
| ACa01 | 15 | 67630000 | 67840000 | 0 | 0 | C15orf61,Il | exonic     | NM_00103.             | . | ENST0000 CpG: 103,(15q23      |
| ACa01 | 15 | 67840000 | 68470000 | 0 | 0 | PIAS1,MAI   | exonic     | NM_00120.             | . | ENST0000 CpG: 112,(15q23      |
| ACa01 | 15 | 68470000 | 1.02E+08 | 0 | 0 | MESDC1,F    | exonic     | NM_00005.             | . | ENST0000 CpG: 17,C 15q26.1-q2 |
| ACa01 | 15 | 1.02E+08 | 1.02E+08 | 0 | 0 | TARSL2      | exonic     | NM_15233.             | . | ENST0000 CpG: 82 15q26.3      |
| ACa01 | 15 | 1.02E+08 | 1.03E+08 | 0 | 0 | OR4F15,O    | exonic     | NM_00100.             | . | ENST0000 CpG: 806,(15q26.3    |
| ACa01 | 15 | 1.03E+08 | 1.03E+08 | 0 | 0 | .           | upstream   | NR_03409.             | . | . 15q26.3                     |
| ACa01 | 16 | 0        | 60000    | 0 | 0 | .           | intergenic | NONE,NR_dist=NONE.    | . | . 16p13.3                     |
| ACa01 | 16 | 60000    | 260000   | 0 | 0 | DDX11L10    | exonic     | NM_00051.             | . | ENST0000 CpG: 68,C 16p13.3    |
| ACa01 | 16 | 260000   | 270000   | 0 | 0 | LUC7L       | intronic   | NM_01803.             | . | ENST0000. 16p13.3             |
| ACa01 | 16 | 270000   | 2380000  | 0 | 0 | MRPL28,P    | exonic     | NM_00029.             | . | ENST0000 CpG: 39,C 16p13.3    |
| ACa01 | 16 | 2380000  | 2470000  | 0 | 0 | ABCA17P,    | ncRNA_ex   | NR_00357.             | . | ENST0000 CpG: 247 16p13.3     |
| ACa01 | 16 | 2470000  | 2500000  | 0 | 0 | CCNF,ABC    | exonic     | NM_00176.             | . | ENST0000 CpG: 146 16p13.3     |
| ACa01 | 16 | 2500000  | 2540000  | 0 | 0 | MIR6768,C   | exonic     | NM_00176.             | . | ENST0000 CpG: 108,(16p13.3    |
| ACa01 | 16 | 2540000  | 14790000 | 0 | 0 | MIR4718,Il  | exonic     | NM_00024.             | . | ENST0000 CpG: 59,C 16p13.3-p1 |
| ACa01 | 16 | 14790000 | 14800000 | 0 | 0 | .           | intergenic | NM_00356 dist=1474;1. | . | ENST0000 CpG: 70 16p13.12     |

|       |    |          |          |   |   |                    |                                 |   |   |                                     |
|-------|----|----------|----------|---|---|--------------------|---------------------------------|---|---|-------------------------------------|
| ACa01 | 16 | 14800000 | 15100000 | 0 | 0 | ABCC6P2, exonic    | NM_00127.                       | . | . | ENST0000 CpG: 69,C 16p13.12-p13.11  |
| ACa01 | 16 | 15100000 | 15120000 | 0 | 0 | PDXDC1 exonic      | NM_00128.                       | . | . | ENST0000. 16p13.11                  |
| ACa01 | 16 | 15120000 | 16360000 | 0 | 0 | MYH11,KI/ exonic   | NM_00100.                       | . | . | ENST0000 CpG: 74,C 16p13.11         |
| ACa01 | 16 | 16360000 | 18830000 | 0 | 0 | XYLT1,MIF exonic   | NM_00100.                       | . | . | ENST0000 CpG: 140,(16p12.3-p12.2)   |
| ACa01 | 16 | 18830000 | 18840000 | 0 | 0 | SMG1 exonic        | NM_01509.                       | . | . | ENST0000. 16p12.3                   |
| ACa01 | 16 | 20420000 | 20480000 | 0 | 0 | ACSM5,AC exonic    | NM_00101.                       | . | . | ENST0000. 16p12.3                   |
| ACa01 | 16 | 20480000 | 21400000 | 0 | 0 | ERI2,ACSI exonic   | NM_00101.                       | . | . | ENST0000 CpG: 46,C 16p12.2-p12.1    |
| ACa01 | 16 | 21400000 | 21500000 | 0 | 0 | NPIP3,LC exonic    | NM_13046.                       | . | . | ENST0000 CpG: 26,C 16p12.2          |
| ACa01 | 16 | 21500000 | 21510000 | 0 | 0 | LOC10027 ncRNA_int | NR_02715.                       | . | . | . 16p12.2                           |
| ACa01 | 16 | 21510000 | 21740000 | 0 | 0 | IGSF6,SLC exonic   | NM_00107.                       | . | . | ENST0000 CpG: 108,(16p12.2-p12.1)   |
| ACa01 | 16 | 21740000 | 21930000 | 0 | 0 | OTOA,RR1 exonic    | NM_00116.                       | . | . | ENST0000 CpG: 25,C 16p12.2          |
| ACa01 | 16 | 21930000 | 21940000 | 0 | 0 | .                  | intergenic NR_00337 dist=99505. | . | . | . 16p12.2                           |
| ACa01 | 16 | 21940000 | 22340000 | 0 | 0 | VWA3A,PC exonic    | NM_00116.                       | . | . | ENST0000 CpG: 115,(16p12.2-p12.1)   |
| ACa01 | 16 | 22340000 | 22360000 | 0 | 0 | CDR2,POL exonic    | NM_00125.                       | . | . | ENST0000. 16p12.2                   |
| ACa01 | 16 | 22360000 | 22630000 | 0 | 0 | LOC65378 exonic    | NM_00113.                       | . | . | ENST0000 CpG: 26,C 16p12.2          |
| ACa01 | 16 | 22630000 | 22820000 | 0 | 0 | MIR548AA ncRNA_ex  | NR_03038.                       | . | . | ENST0000. 16p12.2                   |
| ACa01 | 16 | 22820000 | 28200000 | 0 | 0 | AQP8,HS3 exonic    | NM_00033.                       | . | . | ENST0000 CpG: 97,C 16p12.1-p12.2    |
| ACa01 | 16 | 28200000 | 28340000 | 0 | 0 | XPO6,SBK exonic    | NM_00102.                       | . | . | ENST0000 CpG: 63,C 16p11.2          |
| ACa01 | 16 | 28340000 | 28790000 | 0 | 0 | NUPR1,SL exonic    | NM_00008.                       | . | . | ENST0000 CpG: 43,C 16p11.2          |
| ACa01 | 16 | 28790000 | 28830000 | 0 | 0 | .                  | intergenic NM_00128 dist=5856;t | . | . | ENST0000. 16p11.2                   |
| ACa01 | 16 | 28830000 | 29350000 | 0 | 0 | LOC10028 exonic    | NM_00101.                       | . | . | ENST0000 CpG: 90,C 16p11.2          |
| ACa01 | 16 | 29350000 | 29360000 | 0 | 0 | SNX29P2 ncRNA_int  | NR_00293.                       | . | . | ENST0000. 16p11.2                   |
| ACa01 | 16 | 29360000 | 29560000 | 0 | 0 | SLX1A-SU exonic    | NM_00101.                       | . | . | ENST0000 CpG: 26,C 16p11.2          |
| ACa01 | 16 | 29560000 | 29910000 | 0 | 0 | SPN,KIF22 exonic   | NM_00103.                       | . | . | ENST0000 CpG: 109,(16p11.2-p11.1)   |
| ACa01 | 16 | 29910000 | 30250000 | 0 | 0 | ASPHD1,T exonic    | NM_00003.                       | . | . | ENST0000 CpG: 77,C 16p11.2          |
| ACa01 | 16 | 30250000 | 32020000 | 0 | 0 | CLUHP3,Z exonic    | NM_00029.                       | . | . | ENST0000 CpG: 112,(16p11.2-p11.1)   |
| ACa01 | 16 | 32020000 | 32170000 | 0 | 0 | .                  | intergenic NM_00341 dist=91371. | . | . | ENST0000 CpG: 147,(16p11.2-p11.1)   |
| ACa01 | 16 | 32170000 | 32490000 | 0 | 0 | HERC2P4, exonic    | NM_00124.                       | . | . | ENST0000 CpG: 64,C 16p11.2          |
| ACa01 | 16 | 32490000 | 32680000 | 0 | 0 | .                  | intergenic NR_03386 dist=18869. | . | . | ENST0000 CpG: 36,C 16p11.2          |
| ACa01 | 16 | 32680000 | 33970000 | 0 | 0 | RNU6-76P exonic    | NM_00109.                       | . | . | ENST0000 CpG: 128,(16p11.2-p11.1)   |
| ACa01 | 18 | 25750000 | 25760000 | 0 | 0 | CDH2 exonic        | NM_00179.                       | . | . | ENST0000 CpG: 223 18q12.1           |
| ACa01 | 19 | 30930000 | 33080000 | 0 | 0 | PDCD5,DF exonic    | NM_00113.                       | . | . | ENST0000 CpG: 131,(19q13.11-c13.12) |
| ACa01 | 19 | 33080000 | 33990000 | 0 | 0 | RGS9BP,N exonic    | NM_00028.                       | . | . | ENST0000 CpG: 40,C 19q13.11         |
| ACa01 | 19 | 33990000 | 34930000 | 0 | 0 | GPI,KCTD exonic    | NM_00017.                       | . | . | ENST0000 CpG: 71,C 19q13.11         |
| ACa01 | 19 | 34930000 | 36400000 | 0 | 0 | AC002511 exonic    | NM_00070.                       | . | . | ENST0000 CpG: 37,C 19q13.12-c13.11  |

|       |    |          |          |   |   |           |            |           |             |   |           |            |            |
|-------|----|----------|----------|---|---|-----------|------------|-----------|-------------|---|-----------|------------|------------|
| ACa01 | 19 | 36400000 | 36430000 | 0 | 0 | LRFN3     | UTR5       | NM_02450  | NM_02450.   | . | ENST0000  | CpG: 55,C  | 19q13.12   |
| ACa01 | 19 | 36430000 | 36700000 | 0 | 0 | ALKBH6,P  | exonic     | NM_00100. | .           | . | ENST0000  | CpG: 39,C  | 19q13.12   |
| ACa01 | 19 | 36700000 | 36720000 | 0 | 0 | ZNF565,ZI | UTR5       | NM_00104  | NM_00104.   | . | ENST0000  | CpG: 75    | 19q13.12   |
| ACa01 | 19 | 36720000 | 38630000 | 0 | 0 | ZNF850,LC | exonic     | NM_00101. | .           | . | ENST0000  | CpG: 57,C  | 19q13.12-c |
| ACa01 | 19 | 38630000 | 39530000 | 0 | 0 | SIPA1L3,F | exonic     | NM_00054. | .           | . | ENST0000  | CpG: 26,C  | 19q13.13-c |
| ACa01 | 19 | 39530000 | 39570000 | 0 | 0 | .         | intergenic | NM_17882  | dist=6802;f | . | ENST0000. |            | 19q13.2    |
| ACa01 | 19 | 39570000 | 39910000 | 0 | 0 | PAK4,SAM  | exonic     | NM_00100. | .           | . | ENST0000  | CpG: 44,C  | 19q13.2    |
| ACa01 | 19 | 39910000 | 40510000 | 0 | 0 | LGALS17A  | exonic     | NM_00100. | .           | . | ENST0000  | CpG: 57,C  | 19q13.2    |
| ACa01 | 19 | 42770000 | 43430000 | 0 | 0 | PRR19,TV  | exonic     | NM_00102. | .           | . | ENST0000  | CpG: 102,( | 19q13.2-q1 |
| ACa01 | 20 | 1560000  | 1590000  | 0 | 0 | SIRPB1    | exonic     | NM_00113. | .           | . | ENST0000. |            | 20p13      |
| ACa01 | 21 | 22580000 | 22590000 | 0 | 0 | NCAM2     | intronic   | NM_00454. | .           | . | ENST0000. |            | 21q21.1    |
| ACa01 | 21 | 35490000 | 35520000 | 0 | 0 | MRPS6     | exonic     | NM_03247. | .           | . | ENST0000. |            | 21q22.11   |
| ACa01 | 22 | 19260000 | 19280000 | 0 | 0 | CLTCL1    | exonic     | NM_00183. | .           | . | ENST0000  | CpG: 88    | 22q11.21   |
| ACa01 | 22 | 26350000 | 26360000 | 0 | 0 | MYO18B    | exonic     | NM_03260. | .           | . | ENST0000. |            | 22q12.1    |
| ACa01 | 22 | 38770000 | 38780000 | 0 | 0 | LOC40092  | ncRNA_ex   | NR_00282. | .           | . | ENST0000. |            | 22q13.1    |
| ACa01 | 22 | 47020000 | 47040000 | 0 | 0 | GRAMD4    | exonic     | NM_01512. | .           | . | ENST0000  | CpG: 33,C  | 22q13.31   |
| ACa01 | X  | 43510000 | 43560000 | 0 | 0 | MAOA      | exonic     | NM_00024. | .           | . | ENST0000  | CpG: 52,C  | Xp11.3     |
| ACa01 | X  | 1.09E+08 | 1.1E+08  | 0 | 0 | GUCY2F,A  | exonic     | NM_00102. | .           | . | ENST0000  | CpG: 39,C  | Xq23-Xq22  |
| ACa02 | 1  | 0        | 10000    | 0 | 0 | .         | intergenic | NONE,NR   | dist=NONE.  | . | .         | .          | 1p36.33    |
| ACa02 | 1  | 10000    | 40000    | 0 | 0 | WASH7P,f  | ncRNA_ex   | NR_02454. | .           | . | ENST0000  | CpG: 116   | 1p36.33    |
| ACa02 | 1  | 1.63E+08 | 1.63E+08 | 0 | 0 | RGS5      | ncRNA_ex   | NR_11069. | .           | . | ENST0000. |            | 1q23.3     |
| ACa02 | 2  | 2.14E+08 | 2.43E+08 | 0 | 0 | COL6A3,U  | exonic     | NM_00003. | .           | . | ENST0000  | CpG: 174,( | 2q37.3-q36 |
| ACa02 | 3  | 1.4E+08  | 1.64E+08 | 0 | 0 | LINC01213 | exonic     | NM_00009. | .           | . | ENST0000  | CpG: 53,C  | 3q23-q25.3 |
| ACa02 | 3  | 1.64E+08 | 1.65E+08 | 0 | 0 | .         | ncRNA_ex   | NR_12640. | .           | . | ENST0000. |            | 3q26.1     |
| ACa02 | 3  | 1.65E+08 | 1.73E+08 | 0 | 0 | SERPINI1, | exonic     | NM_00005. | .           | . | ENST0000  | CpG: 39,C  | 3q26.2-q26 |
| ACa02 | 3  | 1.73E+08 | 1.73E+08 | 0 | 0 | .         | downstream | NM_00125. | .           | . | .         | .          | 3q26.31    |
| ACa02 | 3  | 1.73E+08 | 1.81E+08 | 0 | 0 | ACTL6A,M  | exonic     | NM_00101. | .           | . | ENST0000  | CpG: 98,C  | 3q26.33-q2 |
| ACa02 | 3  | 1.81E+08 | 1.88E+08 | 0 | 0 | SNORA81,  | exonic     | NM_00041. | .           | . | ENST0000  | CpG: 32,C  | 3q27.3-q27 |
| ACa02 | 3  | 1.88E+08 | 1.88E+08 | 0 | 0 | LPP       | intronic   | NM_00116. | .           | . | ENST0000. |            | 3q28       |
| ACa02 | 3  | 1.88E+08 | 1.89E+08 | 0 | 0 | LPP,TPRG  | exonic     | NM_00111. | .           | . | ENST0000  | CpG: 25    | 3q28       |
| ACa02 | 3  | 1.89E+08 | 1.9E+08  | 0 | 0 | TP63      | exonic     | NM_00111. | .           | . | ENST0000. |            | 3q28       |
| ACa02 | 3  | 1.9E+08  | 1.98E+08 | 0 | 0 | PPP1R2,A  | exonic     | NM_00099. | .           | . | ENST0000  | CpG: 138,( | 3q29-q28   |
| ACa02 | 3  | 1.98E+08 | 1.98E+08 | 0 | 0 | .         | intergenic | NM_00114  | dist=2272;f | . | ENST0000. |            | 3q29       |
| ACa02 | 3  | 1.98E+08 | 1.98E+08 | 0 | 0 | .         | intergenic | NM_00114  | dist=32272. | . | .         | .          | 3q29       |
| ACa02 | 3  | 1.98E+08 | 1.98E+08 | 0 | 0 | .         | intergenic | NM_00114  | dist=52272. | . | .         | .          | 3q29       |

|       |    |          |          |   |   |           |            |                       |   |   |                     |          |
|-------|----|----------|----------|---|---|-----------|------------|-----------------------|---|---|---------------------|----------|
| ACa02 | 5  | 9220000  | 9240000  | 0 | 0 | SEMA5A    | exonic     | NM_00396.             | . | . | ENST0000.           | 5p15.31  |
| ACa02 | 5  | 81280000 | 81290000 | 0 | 0 | ATG10     | exonic     | NM_00113.             | . | . | ENST0000.           | 5q14.1   |
| ACa02 | 5  | 1.15E+08 | 1.15E+08 | 0 | 0 | COMMD1C   | exonic     | NM_01614.             | . | . | ENST0000.           | 5q23.1   |
| ACa02 | 5  | 1.4E+08  | 1.4E+08  | 0 | 0 | PCDHA12   | exonic     | NM_01889.             | . | . | ENST0000.           | 5q31.3   |
| ACa02 | 5  | 1.45E+08 | 1.45E+08 | 0 | 0 | PRELID2   | exonic     | NM_13849.             | . | . | ENST0000.           | 5q32     |
| ACa02 | 5  | 1.72E+08 | 1.72E+08 | 0 | 0 | NEURL1B   | exonic     | NM_00114.             | . | . | ENST0000 CpG: 94    | 5q35.1   |
| ACa02 | 6  | 0        | 110000   | 0 | 0 | .         | intergenic | NONE,NR_dist=NONE.    | . | . | .                   | 6p25.3   |
| ACa02 | 6  | 130000   | 150000   | 0 | 0 | LINC00266 | ncRNA_ex   | NR_10981.             | . | . | ENST0000.           | 6p25.3   |
| ACa02 | 6  | 37970000 | 38050000 | 0 | 0 | ZFAND3    | exonic     | NM_02194.             | . | . | ENST0000.           | 6p21.2   |
| ACa02 | 7  | 1.54E+08 | 1.54E+08 | 0 | 0 | DPP6      | exonic     | NM_00103.             | . | . | ENST0000.           | 7q36.2   |
| ACa02 | 8  | 39040000 | 39050000 | 0 | 0 | ADAM32    | exonic     | NM_14500.             | . | . | ENST0000.           | 8p11.22  |
| ACa02 | 9  | 20000    | 40000    | 0 | 0 | FAM138C   | exonic     | NM_18290.             | . | . | ENST0000 CpG: 69    | 9p24.3   |
| ACa02 | 9  | 86360000 | 86370000 | 0 | 0 | GKAP1     | exonic     | NM_00113.             | . | . | ENST0000.           | 9q21.32  |
| ACa02 | 9  | 1.04E+08 | 1.04E+08 | 0 | 0 | LPPR1     | exonic     | NM_01775.             | . | . | ENST0000.           | 9q31.1   |
| ACa02 | 9  | 1.14E+08 | 1.14E+08 | 0 | 0 | LPAR1     | intronic   | NM_00140.             | . | . | ENST0000.           | 9q31.3   |
| ACa02 | 9  | 1.41E+08 | 1.41E+08 | 0 | 0 | FAM157B   | exonic     | NM_00114.             | . | . | ENST0000 CpG: 27    | 9q34.3   |
| ACa02 | 10 | 20290000 | 20360000 | 0 | 0 | PLXDC2    | exonic     | NM_00128.             | . | . | ENST0000.           | 10p12.31 |
| ACa02 | 10 | 1.12E+08 | 1.12E+08 | 0 | 0 | MXI1      | exonic     | NM_00596.             | . | . | ENST0000.           | 10q25.2  |
| ACa02 | 11 | 1.01E+08 | 1.01E+08 | 0 | 0 | ARHGAP4   | exonic     | NM_15243.             | . | . | ENST0000.           | 11q22.1  |
| ACa02 | 12 | 14690000 | 14730000 | 0 | 0 | PLBD1     | exonic     | NM_02482.             | . | . | ENST0000 CpG: 65    | 12p13.1  |
| ACa02 | 12 | 1.31E+08 | 1.31E+08 | 0 | 0 | RIMBP2,R  | exonic     | NM_00119.             | . | . | ENST0000 CpG: 341,( | 12q24.33 |
| ACa02 | 13 | 1.13E+08 | 1.13E+08 | 0 | 0 | TUBGCP3   | exonic     | NM_00128.             | . | . | ENST0000.           | 13q34    |
| ACa02 | 14 | 80120000 | 80140000 | 0 | 0 | NRXN3     | exonic     | NM_00110.             | . | . | ENST0000.           | 14q31.1  |
| ACa02 | 14 | 89690000 | 89700000 | 0 | 0 | FOXN3     | intronic   | NM_00108.             | . | . | ENST0000.           | 14q31.3  |
| ACa02 | 15 | 57350000 | 57490000 | 0 | 0 | TCF12     | exonic     | NM_00320.             | . | . | ENST0000.           | 15q21.3  |
| ACa02 | 15 | 1.02E+08 | 1.03E+08 | 0 | 0 | WASH3P,(  | exonic     | NM_00100.             | . | . | ENST0000 CpG: 116   | 15q26.3  |
| ACa02 | 15 | 1.03E+08 | 1.03E+08 | 0 | 0 | .         | upstream   | NR_03409.             | . | . | .                   | 15q26.3  |
| ACa02 | 16 | 23880000 | 23890000 | 0 | 0 | PRKCB     | intronic   | NM_00273.             | . | . | ENST0000.           | 16p12.2  |
| ACa02 | 16 | 29970000 | 30140000 | 0 | 0 | ALDOA,FA  | exonic     | NM_00003.             | . | . | ENST0000 CpG: 17,C  | 16p11.2  |
| ACa02 | 16 | 30140000 | 30190000 | 0 | 0 | .         | intergenic | NM_00274 dist=5370;(. | . | . | .                   | 16p11.2  |
| ACa02 | 16 | 30190000 | 30200000 | 0 | 0 | CORO1A    | exonic     | NM_00119.             | . | . | ENST0000 CpG: 49    | 16p11.2  |
| ACa02 | 16 | 47170000 | 47260000 | 0 | 0 | ITFG1,NE1 | exonic     | NM_00120.             | . | . | ENST0000 CpG: 186   | 16q12.1  |
| ACa02 | 16 | 56550000 | 56560000 | 0 | 0 | BBS2      | exonic     | NM_03188.             | . | . | ENST0000 CpG: 59    | 16q12.2  |
| ACa02 | 18 | 0        | 40000    | 0 | 0 | .         | ncRNA_ex   | NR_11079.             | . | . | ENST0000 CpG: 67    | 18p11.32 |
| ACa02 | 18 | 40000    | 120000   | 0 | 0 | ROCK1P1   | ncRNA_ex   | NR_03377.             | . | . | ENST0000 CpG: 51,C  | 18p11.32 |

|       |    |          |          |   |   |            |            |           |              |   |           |                      |         |
|-------|----|----------|----------|---|---|------------|------------|-----------|--------------|---|-----------|----------------------|---------|
| ACa02 | 18 | 120000   | 2970000  | 0 | 0 | THOC1,C1   | exonic     | NM_00101. | .            | . | ENST0000  | CpG: 146,(18p11.31-f |         |
| ACa02 | 18 | 3060000  | 6950000  | 0 | 0 | DLGAP1-A   | exonic     | NM_00100. | .            | . | ENST0000  | CpG: 241,(18p11.31   |         |
| ACa02 | 18 | 6950000  | 34530000 | 0 | 0 | C18orf61,T | exonic     | NM_00022. | .            | . | ENST0000  | CpG: 88,C 18p11.23-c |         |
| ACa02 | 18 | 34530000 | 34810000 | 0 | 0 | KIAA1328   | exonic     | NM_02077. | .            | . | ENST0000. | 18q12.2              |         |
| ACa02 | 18 | 34810000 | 61660000 | 0 | 0 | SNORD58    | exonic     | NM_00014. | .            | . | ENST0000  | CpG: 119,(18q12.2-q2 |         |
| ACa02 | 18 | 61760000 | 77480000 | 0 | 0 | LINC0030f  | exonic     | NM_00102. | .            | . | ENST0000  | CpG: 52,C 18q23-q22  |         |
| ACa02 | 18 | 77620000 | 77930000 | 0 | 0 | PARD6G,T   | exonic     | NM_00113. | .            | . | ENST0000  | CpG: 114,(18q23      |         |
| ACa02 | 18 | 77930000 | 78077248 | 0 | 0 | PARD6G-/   | exonic     | NM_03251. | .            | . | ENST0000  | CpG: 122 18q23       |         |
| ACa02 | 19 | 0        | 60000    | 0 | 0 | .          | downstream | NR_03326. | .            | . | .         | 19p13.3              |         |
| ACa02 | 19 | 60000    | 80000    | 0 | 0 | FAM138A,   | ncRNA_ex   | NR_02681. | .            | . | ENST0000  | CpG: 117 19p13.3     |         |
| ACa02 | 19 | 80000    | 100000   | 0 | 0 | .          | intergenic | NR_02682  | dist=2310;f. | . | .         | 19p13.3              |         |
| ACa02 | 19 | 100000   | 120000   | 0 | 0 | OR4F17     | exonic     | NM_00100. | .            | . | ENST0000. | 19p13.3              |         |
| ACa02 | 19 | 120000   | 150000   | 0 | 0 | .          | intergenic | NM_00100  | dist=8404;f. | . | .         | 19p13.3              |         |
| ACa02 | 19 | 150000   | 160000   | 0 | 0 | .          | intergenic | NM_00100  | dist=38404.  | . | .         | ENST0000.            | 19p13.3 |
| ACa02 | 19 | 160000   | 180000   | 0 | 0 | .          | intergenic | NM_00100  | dist=48404.  | . | .         | ENST0000.            | 19p13.3 |
| ACa02 | 19 | 180000   | 210000   | 0 | 0 | LINC0100z  | ncRNA_ex   | NR_02832. | .            | . | ENST0000. | 19p13.3              |         |
| ACa02 | 19 | 10280000 | 10420000 | 0 | 0 | DNMT1,Mf   | exonic     | NM_00020. | .            | . | ENST0000  | CpG: 80,C 19p13.2    |         |
| ACa02 | 19 | 31830000 | 32100000 | 0 | 0 | TSHZ3,TH   | exonic     | NM_00120. | .            | . | ENST0000  | CpG: 31,C 19q12      |         |
| ACa02 | 19 | 32100000 | 32110000 | 0 | 0 | .          | intergenic | NM_00127  | dist=15544.  | . | .         | 19q12                |         |
| ACa02 | 19 | 35270000 | 35280000 | 0 | 0 | .          | intergenic | NM_00100  | dist=5866;f. | . | .         | 19q13.11             |         |
| ACa02 | 20 | 13460000 | 13550000 | 0 | 0 | TASP1      | exonic     | NM_01771. | .            | . | ENST0000. | 20p12.1              |         |
| ACa02 | 20 | 48180000 | 48190000 | 0 | 0 | PTGIS      | exonic     | NM_00096. | .            | . | ENST0000  | CpG: 53 20q13.13     |         |
| ACa02 | 22 | 16950000 | 16970000 | 0 | 0 | .          | intergenic | NM_00100  | dist=50019.  | . | .         | 22q11.1              |         |
| ACa02 | 22 | 20340000 | 20610000 | 0 | 0 | LOC72944   | exonic     | NM_00124. | .            | . | ENST0000  | CpG: 129,(22q11.21   |         |
| ACa02 | 22 | 20610000 | 21660000 | 0 | 0 | THAP7-AS   | exonic     | NM_00018. | .            | . | ENST0000  | CpG: 248,(22q11.21   |         |
| ACa02 | 22 | 22580000 | 22590000 | 0 | 0 | .          | intergenic | NM_00393  | dist=24276.  | . | .         | 22q11.22             |         |
| ACa02 | 22 | 22590000 | 24270000 | 0 | 0 | CES5AP1,   | exonic     | NM_00100. | .            | . | ENST0000  | CpG: 30,C 22q11.22-c |         |
| ACa02 | 22 | 24270000 | 24330000 | 0 | 0 | GSTT2,GS   | exonic     | NM_00085. | .            | . | ENST0000  | CpG: 88,C 22q11.23   |         |
| ACa02 | 22 | 24550000 | 24960000 | 0 | 0 | ADORA2A    | exonic     | NM_00067. | .            | . | ENST0000  | CpG: 24,C 22q11.23   |         |
| ACa02 | 22 | 24960000 | 24970000 | 0 | 0 | SNRPD3     | exonic     | NM_00127. | .            | . | ENST0000. | 22q11.23             |         |
| ACa02 | 22 | 25060000 | 29490000 | 0 | 0 | MYO18B,M   | exonic     | NM_00049. | .            | . | ENST0000  | CpG: 30,C 22q12.1-q1 |         |
| ACa02 | 22 | 29490000 | 30940000 | 0 | 0 | SDC4P,Mf   | exonic     | NM_00026. | .            | . | ENST0000  | CpG: 95,C 22q12.2-q1 |         |
| ACa02 | 22 | 30940000 | 30970000 | 0 | 0 | SEC14L6,(  | exonic     | NM_00119. | .            | . | ENST0000  | CpG: 113 22q12.2     |         |
| ACa02 | 22 | 30970000 | 31860000 | 0 | 0 | SMTN,SEL   | exonic     | NM_00035. | .            | . | ENST0000  | CpG: 54,C 22q12.2    |         |
| ACa02 | 22 | 31860000 | 31880000 | 0 | 0 | EIF4ENIF1  | exonic     | NM_00116. | .            | . | ENST0000. | 22q12.2              |         |

|       |    |          |          |   |   |                    |                      |   |   |                               |
|-------|----|----------|----------|---|---|--------------------|----------------------|---|---|-------------------------------|
| ACa02 | 22 | 32000000 | 36640000 | 0 | 0 | DEPDC5,A exonic    | NM_00034.            | . | . | ENST0000 CpG: 29,C 22q12.2-q1 |
| ACa02 | 22 | 36670000 | 37340000 | 0 | 0 | IFT27,MIR exonic   | NM_00039.            | . | . | ENST0000 CpG: 150,(22q12.3    |
| ACa02 | 22 | 37340000 | 37380000 | 0 | 0 | LL22NC01 ncRNA_ex  | NR_03895.            | . | . | ENST0000. 22q12.3             |
| ACa02 | 22 | 37500000 | 41300000 | 0 | 0 | LOC10013 exonic    | NM_00002.            | . | . | ENST0000 CpG: 159,(22q13.1-q1 |
| ACa02 | 22 | 42070000 | 46840000 | 0 | 0 | NUP50,TC exonic    | NM_00010.            | . | . | ENST0000 CpG: 176,(22q13.2-q1 |
| ACa02 | 22 | 46840000 | 49150000 | 0 | 0 | MIR3201,L exonic   | NM_00108.            | . | . | ENST0000 CpG: 26,C 22q13.31-c |
| ACa02 | 22 | 50010000 | 51190000 | 0 | 0 | SCO2,PIM exonic    | NM_00048.            | . | . | ENST0000 CpG: 44,C 22q13.33   |
| ACa02 | 22 | 51190000 | 51200000 | 0 | 0 | RPL23AP8 ncRNA_ex  | NR_02698.            | . | . | . 22q13.33                    |
| ACa02 | X  | 24620000 | 24640000 | 0 | 0 | PCYT1B exonic      | NM_00116.            | . | . | ENST0000. Xp22.11             |
| ACa02 | X  | 37880000 | 37900000 | 0 | 0 | SYTL5 exonic       | NM_00116.            | . | . | ENST0000. Xp11.4              |
| ACa02 | X  | 1.12E+08 | 1.12E+08 | 0 | 0 | LHFPL1 exonic      | NM_17817.            | . | . | ENST0000. Xq23                |
| ACa02 | X  | 1.35E+08 | 1.35E+08 | 0 | 0 | SLC9A6,Fl exonic   | NM_00104.            | . | . | ENST0000 CpG: 32,C Xq26.3     |
| ACa03 | 1  | 33200000 | 33220000 | 0 | 0 | KIAA1522 exonic    | NM_02088.            | . | . | ENST0000 CpG: 61,C 1p35.1     |
| ACa03 | 1  | 1.97E+08 | 1.97E+08 | 0 | 0 | CRB1 exonic        | NM_00119.            | . | . | ENST0000. 1q31.3              |
| ACa03 | 1  | 2.32E+08 | 2.32E+08 | 0 | 0 | DISC2,TSt exonic   | NM_00101.            | . | . | ENST0000. 1q42.2              |
| ACa03 | 2  | 12330000 | 12340000 | 0 | 0 | AC096559 ncRNA_int | NR_11019.            | . | . | ENST0000. 2p24.3              |
| ACa03 | 2  | 98450000 | 98620000 | 0 | 0 | TMEM131 exonic     | NM_01534.            | . | . | ENST0000 CpG: 146 2q11.2      |
| ACa03 | 2  | 2.19E+08 | 2.19E+08 | 0 | 0 | TNS1 UTR5          | NM_02264 NM_02264.   | . | . | ENST0000 CpG: 22 2q35         |
| ACa03 | 3  | 1.31E+08 | 1.31E+08 | 0 | 0 | NEK11 exonic       | NM_00114.            | . | . | ENST0000. 3q22.1              |
| ACa03 | 3  | 1.69E+08 | 1.69E+08 | 0 | 0 | . intergenic       | NM_00120 dist=38437. | . | . | . 3q26.2                      |
| ACa03 | 3  | 1.71E+08 | 1.71E+08 | 0 | 0 | TNIK exonic        | NM_00116.            | . | . | ENST0000. 3q26.31             |
| ACa03 | 4  | 24890000 | 24900000 | 0 | 0 | CCDC149 exonic     | NM_17346.            | . | . | ENST0000. 4p15.2              |
| ACa03 | 4  | 81860000 | 81870000 | 0 | 0 | C4orf22 exonic     | NM_00120.            | . | . | ENST0000. 4q21.21             |
| ACa03 | 5  | 58880000 | 58890000 | 0 | 0 | PDE4D exonic       | NM_00620.            | . | . | ENST0000. 5q11.2              |
| ACa03 | 5  | 1.08E+08 | 1.08E+08 | 0 | 0 | FBXL17 exonic      | NM_00116.            | . | . | ENST0000. 5q21.3              |
| ACa03 | 6  | 1.22E+08 | 1.22E+08 | 0 | 0 | TBC1D32 exonic     | NM_15273.            | . | . | ENST0000. 6q22.31             |
| ACa03 | 7  | 2180000  | 2190000  | 0 | 0 | MAD1L1 exonic      | NM_00101.            | . | . | ENST0000 CpG: 30 7p22.3       |
| ACa03 | 7  | 37310000 | 37320000 | 0 | 0 | ELMO1 exonic       | NM_00120.            | . | . | ENST0000. 7p14.1              |
| ACa03 | 7  | 81670000 | 82080000 | 0 | 0 | CACNA2D exonic     | NM_00072.            | . | . | ENST0000 CpG: 143 7q21.11     |
| ACa03 | 7  | 1.35E+08 | 1.35E+08 | 0 | 0 | CALD1 exonic       | NM_00434.            | . | . | ENST0000. 7q33                |
| ACa03 | 7  | 1.4E+08  | 1.4E+08  | 0 | 0 | PARP12 exonic      | NM_02275.            | . | . | ENST0000 CpG: 124 7q34        |
| ACa03 | 8  | 850000   | 970000   | 0 | 0 | ERICH1-A ncRNA_ex  | NR_07339.            | . | . | ENST0000 CpG: 61,C 8p23.3     |
| ACa03 | 9  | 80430000 | 80440000 | 0 | 0 | GNAQ exonic        | NM_00207.            | . | . | ENST0000. 9q21.2              |
| ACa03 | 9  | 1.27E+08 | 1.27E+08 | 0 | 0 | DENND1A exonic     | NM_02094.            | . | . | ENST0000. 9q33.3              |
| ACa03 | 10 | 18290000 | 18300000 | 0 | 0 | RP11-110f exonic   | NM_00114.            | . | . | ENST0000. 10p12.33            |

|       |    |          |          |   |   |                   |            |                      |   |   |                   |          |
|-------|----|----------|----------|---|---|-------------------|------------|----------------------|---|---|-------------------|----------|
| ACa03 | 10 | 62490000 | 62500000 | 0 | 0 | ANK3              | exonic     | NM_00120.            | . | . | ENST0000 CpG: 52  | 10q21.2  |
| ACa03 | 10 | 68280000 | 68290000 | 0 | 0 | CTNNA3            | exonic     | NM_00112.            | . | . | ENST0000.         | 10q21.3  |
| ACa03 | 10 | 1.19E+08 | 1.19E+08 | 0 | 0 | PDZD8             | exonic     | NM_17379.            | . | . | ENST0000.         | 10q25.3  |
| ACa03 | 10 | 1.29E+08 | 1.29E+08 | 0 | 0 | NPS               | exonic     | NM_00103.            | . | . | ENST0000.         | 10q26.2  |
| ACa03 | 11 | 74500000 | 74510000 | 0 | 0 | RNF169            | exonic     | NM_00109.            | . | . | ENST0000.         | 11q13.4  |
| ACa03 | 11 | 79130000 | 79140000 | 0 | 0 | MIR5579,TncRNA_ex |            | NR_04984.            | . | . | ENST0000.         | 11q14.1  |
| ACa03 | 11 | 83540000 | 83810000 | 0 | 0 | DLG2              | exonic     | NM_00114.            | . | . | ENST0000.         | 11q14.1  |
| ACa03 | 11 | 92430000 | 92440000 | 0 | 0 | FAT3              | exonic     | NM_00100.            | . | . | ENST0000.         | 11q14.3  |
| ACa03 | 11 | 1.15E+08 | 1.15E+08 | 0 | 0 | CADM1             | intronic   | NM_00109.            | . | . | ENST0000.         | 11q23.3  |
| ACa03 | 11 | 1.25E+08 | 1.25E+08 | 0 | 0 | SPA17             | exonic     | NM_01742.            | . | . | ENST0000.         | 11q24.2  |
| ACa03 | 12 | 29780000 | 29790000 | 0 | 0 | TMTC1             | exonic     | NM_00119.            | . | . | ENST0000.         | 12p11.22 |
| ACa03 | 12 | 47580000 | 47590000 | 0 | 0 | MIR4698,FncRNA_ex |            | NR_03984.            | . | . | ENST0000.         | 12q13.11 |
| ACa03 | 12 | 97220000 | 97260000 | 0 | 0 | .                 | intergenic | NM_00117 dist=42563. | . | . | ENST0000.         | 12q23.1  |
| ACa03 | 13 | 50840000 | 50850000 | 0 | 0 | DLEU1             | ncRNA_int  | NR_10997.            | . | . | ENST0000.         | 13q14.2  |
| ACa03 | 14 | 25340000 | 25350000 | 0 | 0 | STXBP6            | intronic   | NM_01417.            | . | . | ENST0000.         | 14q12    |
| ACa03 | 14 | 33140000 | 33150000 | 0 | 0 | AKAP6             | exonic     | NM_00427.            | . | . | ENST0000.         | 14q12    |
| ACa03 | 14 | 63460000 | 63520000 | 0 | 0 | KCNH5             | exonic     | NM_13931.            | . | . | ENST0000 CpG: 92  | 14q23.2  |
| ACa03 | 14 | 73240000 | 73250000 | 0 | 0 | DPF3              | intronic   | NM_00128.            | . | . | ENST0000.         | 14q24.2  |
| ACa03 | 14 | 80290000 | 80300000 | 0 | 0 | NRXN3             | intronic   | NM_00110.            | . | . | ENST0000.         | 14q31.1  |
| ACa03 | 14 | 91440000 | 91470000 | 0 | 0 | RPS6KA5           | exonic     | NM_00475.            | . | . | ENST0000.         | 14q32.11 |
| ACa03 | 15 | 58430000 | 58440000 | 0 | 0 | AQP9              | exonic     | NM_02098.            | . | . | ENST0000.         | 15q21.3  |
| ACa03 | 17 | 480000   | 490000   | 0 | 0 | VPS53             | exonic     | NM_00112.            | . | . | ENST0000.         | 17p13.3  |
| ACa03 | 17 | 61340000 | 61350000 | 0 | 0 | TANC2             | exonic     | NM_02518.            | . | . | ENST0000.         | 17q23.3  |
| ACa03 | 18 | 21770000 | 21870000 | 0 | 0 | OSBPL1A           | exonic     | NM_00124.            | . | . | ENST0000 CpG: 86  | 18q11.2  |
| ACa03 | 19 | 42060000 | 42070000 | 0 | 0 | CEACAM2           | intronic   | NM_00128.            | . | . | ENST0000.         | 19q13.2  |
| ACa03 | 19 | 51730000 | 51750000 | 0 | 0 | CD33              | exonic     | NM_00108.            | . | . | ENST0000.         | 19q13.41 |
| ACa03 | 21 | 24450000 | 24460000 | 0 | 0 | .                 | intergenic | NR_03840 dist=96115. | . | . | ENST0000.         | 21q21.2  |
| ACa03 | 21 | 27480000 | 27520000 | 0 | 0 | APP               | exonic     | NM_00048.            | . | . | ENST0000.         | 21q21.3  |
| ACa03 | 21 | 30830000 | 30840000 | 0 | 0 | .                 | intergenic | NR_04656 dist=83700. | . | . | .                 | 21q21.3  |
| ACa03 | 21 | 44370000 | 44380000 | 0 | 0 | .                 | intergenic | NM_02107 dist=40227. | . | . | ENST0000.         | 21q22.3  |
| ACa03 | 22 | 44110000 | 44140000 | 0 | 0 | EFCAB6            | exonic     | NM_02278.            | . | . | ENST0000.         | 22q13.2  |
| ACa03 | X  | 31670000 | 31680000 | 0 | 0 | DMD               | exonic     | NM_00010.            | . | . | ENST0000.         | Xp21.1   |
| ACa03 | X  | 34670000 | 34680000 | 0 | 0 | TMEM47            | exonic     | NM_03144.            | . | . | ENST0000 CpG: 113 | Xp21.1   |
| ACa04 | 2  | 20790000 | 20800000 | 0 | 0 | HS1BP3-ITncRNA_ex |            | NR_04683.            | . | . | ENST0000.         | 2p24.1   |
| ACa04 | 2  | 35690000 | 35700000 | 0 | 0 | .                 | intergenic | NR_12640 dist=74237. | . | . | ENST0000.         | 2p22.3   |



|       |    |          |          |   |   |           |            |                      |   |   |                     |            |
|-------|----|----------|----------|---|---|-----------|------------|----------------------|---|---|---------------------|------------|
| ACa04 | 2  | 62900000 | 63100000 | 0 | 0 | EHBP1     | exonic     | NM_00114.            | . | . | ENST0000 CpG: 64    | 2p15       |
| ACa04 | 2  | 68790000 | 68810000 | 0 | 0 | APLF      | exonic     | NM_17354.            | . | . | ENST0000.           | 2p13.3     |
| ACa04 | 2  | 1.63E+08 | 1.63E+08 | 0 | 0 | KCNH7     | exonic     | NM_03327.            | . | . | ENST0000.           | 2q24.2     |
| ACa04 | 2  | 2.14E+08 | 2.14E+08 | 0 | 0 | SPAG16    | exonic     | NM_02453.            | . | . | ENST0000.           | 2q34       |
| ACa04 | 3  | 1.11E+08 | 1.3E+08  | 0 | 0 | HEG1,CST  | exonic     | NM_00017.            | . | . | ENST0000 CpG: 71,C  | 3q13.13-q2 |
| ACa04 | 3  | 1.3E+08  | 1.3E+08  | 0 | 0 | COL6A4P2  | ncRNA_ex   | NR_02425.            | . | . | ENST0000 CpG: 111,C | 13q22.1    |
| ACa04 | 3  | 1.3E+08  | 1.95E+08 | 0 | 0 | SPSB4,TM  | exonic     | NM_00005.            | . | . | ENST0000 CpG: 94,C  | 3q27.3-q28 |
| ACa04 | 3  | 1.95E+08 | 1.98E+08 | 0 | 0 | MIR922,ZI | exonic     | NM_00099.            | . | . | ENST0000 CpG: 56,C  | 3q29       |
| ACa04 | 3  | 1.98E+08 | 1.98E+08 | 0 | 0 | FAM157A   | exonic     | NM_00114.            | . | . | .                   | 3q29       |
| ACa04 | 3  | 1.98E+08 | 1.98E+08 | 0 | 0 | FAM157A   | exonic     | NM_00114.            | . | . | ENST0000 CpG: 27    | 3q29       |
| ACa04 | 3  | 1.98E+08 | 1.98E+08 | 0 | 0 | .         | intergenic | NM_00114 dist=52272. | . | . | .                   | 3q29       |
| ACa04 | 4  | 3380000  | 3390000  | 0 | 0 | RGS12     | exonic     | NM_00292.            | . | . | ENST0000.           | 4p16.3     |
| ACa04 | 4  | 1.14E+08 | 1.14E+08 | 0 | 0 | MIR1243,A | exonic     | NM_00114.            | . | . | ENST0000.           | 4q25       |
| ACa04 | 4  | 1.68E+08 | 1.68E+08 | 0 | 0 | SPOCK3    | exonic     | NM_00104.            | . | . | ENST0000.           | 4q32.3     |
| ACa04 | 4  | 1.76E+08 | 1.76E+08 | 0 | 0 | GLRA3     | exonic     | NM_00104.            | . | . | ENST0000.           | 4q34.1     |
| ACa04 | 6  | 35420000 | 35760000 | 0 | 0 | TULP1,RP  | exonic     | NM_00101.            | . | . | ENST0000 CpG: 23,C  | 6p21.31    |
| ACa04 | 6  | 1.58E+08 | 1.58E+08 | 0 | 0 | SNX9      | exonic     | NM_01622.            | . | . | ENST0000.           | 6q25.3     |
| ACa04 | 7  | 29150000 | 29170000 | 0 | 0 | CPVL      | exonic     | NM_01902.            | . | . | ENST0000.           | 7p14.3     |
| ACa04 | 8  | 1.34E+08 | 1.34E+08 | 0 | 0 | PHF20L1,1 | exonic     | NM_00114.            | . | . | ENST0000 CpG: 53    | 8q24.22    |
| ACa04 | 8  | 1.44E+08 | 1.44E+08 | 0 | 0 | TOP1MT    | intronic   | NM_00125.            | . | . | ENST0000.           | 8q24.3     |
| ACa04 | 9  | 80400000 | 80420000 | 0 | 0 | GNAQ      | exonic     | NM_00207.            | . | . | ENST0000.           | 9q21.2     |
| ACa04 | 9  | 1.03E+08 | 1.03E+08 | 0 | 0 | STX17,ER  | exonic     | NM_01505.            | . | . | ENST0000.           | 9q31.1     |
| ACa04 | 9  | 1.28E+08 | 1.28E+08 | 0 | 0 | MAPKAP1   | exonic     | NM_00100.            | . | . | ENST0000.           | 9q33.3     |
| ACa04 | 10 | 32660000 | 32670000 | 0 | 0 | LOC10203  | exonic     | NM_00128.            | . | . | ENST0000.           | 10p11.22   |
| ACa04 | 10 | 34550000 | 34580000 | 0 | 0 | PARD3     | exonic     | NM_00118.            | . | . | ENST0000.           | 10p11.21   |
| ACa04 | 10 | 60460000 | 60470000 | 0 | 0 | BICC1     | exonic     | NM_00108.            | . | . | ENST0000.           | 10q21.1    |
| ACa04 | 10 | 70540000 | 70590000 | 0 | 0 | CCAR1,ST  | exonic     | NM_00113.            | . | . | ENST0000 CpG: 169   | 10q21.3    |
| ACa04 | 10 | 98470000 | 98480000 | 0 | 0 | PIK3AP1   | intronic   | NM_15230.            | . | . | ENST0000 CpG: 62    | 10q24.1    |
| ACa04 | 10 | 1.18E+08 | 1.18E+08 | 0 | 0 | CCDC172   | exonic     | NM_19851.            | . | . | ENST0000.           | 10q25.3    |
| ACa04 | 10 | 1.28E+08 | 1.28E+08 | 0 | 0 | .         | intergenic | NM_00100 dist=11999. | . | . | ENST0000.           | 10q26.2    |
| ACa04 | 12 | 0        | 60000    | 0 | 0 | .         | intergenic | NONE,NR_dist=NONE.   | . | . | .                   | 12p13.33   |
| ACa04 | 12 | 60000    | 80000    | 0 | 0 | .         | ncRNA_ex   | NR_02682.            | . | . | ENST0000 CpG: 112   | 12p13.33   |
| ACa04 | 12 | 80000    | 100000   | 0 | 0 | LOC10028  | ncRNA_ex   | NR_02826.            | . | . | .                   | 12p13.33   |
| ACa04 | 12 | 80260000 | 80270000 | 0 | 0 | PPP1R12A  | exonic     | NM_00114.            | . | . | ENST0000.           | 12q21.2    |
| ACa04 | 13 | 20790000 | 21020000 | 0 | 0 | GJB6,CRY  | exonic     | NM_00111.            | . | . | ENST0000 CpG: 87,C  | 13q12.11   |

|       |    |          |          |   |   |            |            |                       |   |   |                     |            |
|-------|----|----------|----------|---|---|------------|------------|-----------------------|---|---|---------------------|------------|
| ACa04 | 13 | 45820000 | 45860000 | 0 | 0 | GTF2F2     | exonic     | NM_00412.             | . | . | ENST0000.           | 13q14.13   |
| ACa04 | 13 | 46030000 | 46040000 | 0 | 0 | COG3       | exonic     | NM_03143.             | . | . | ENST0000 CpG: 56    | 13q14.13   |
| ACa04 | 13 | 46780000 | 46790000 | 0 | 0 | LRRC63     | exonic     | NM_00128.             | . | . | ENST0000.           | 13q14.13   |
| ACa04 | 13 | 1E+08    | 1E+08    | 0 | 0 | CLYBL      | exonic     | NM_20680.             | . | . | ENST0000.           | 13q32.3    |
| ACa04 | 13 | 1.06E+08 | 1.06E+08 | 0 | 0 | DAOA,DAI   | exonic     | NM_00116.             | . | . | ENST0000.           | 13q33.2    |
| ACa04 | 14 | 36030000 | 36050000 | 0 | 0 | RALGAPA    | exonic     | NM_00128.             | . | . | ENST0000.           | 14q13.2    |
| ACa04 | 15 | 27570000 | 27730000 | 0 | 0 | GABRG3     | exonic     | NM_00127.             | . | . | ENST0000.           | 15q12      |
| ACa04 | 15 | 64540000 | 64600000 | 0 | 0 | CSNK1G1    | exonic     | NM_02204.             | . | . | ENST0000.           | 15q22.31   |
| ACa04 | 16 | 90170000 | 90290000 | 0 | 0 | .          | ncRNA_ex   | NR_12616.             | . | . | ENST0000 CpG: 26,C  | 16q24.3    |
| ACa04 | 16 | 90290000 | 90354753 | 0 | 0 | .          | intergenic | NR_12616 dist=45986.  | . | . | .                   | 16q24.3    |
| ACa04 | 17 | 930000   | 940000   | 0 | 0 | ABR        | exonic     | NM_00125.             | . | . | ENST0000 CpG: 59,C  | 17p13.3    |
| ACa04 | 17 | 60630000 | 60640000 | 0 | 0 | TLK2       | exonic     | NM_00128.             | . | . | ENST0000.           | 17q23.2    |
| ACa04 | 17 | 67310000 | 67320000 | 0 | 0 | ABCA5      | exonic     | NM_01867.             | . | . | ENST0000.           | 17q24.3    |
| ACa04 | 18 | 0        | 40000    | 0 | 0 | .          | ncRNA_ex   | NR_11079.             | . | . | ENST0000 CpG: 67    | 18p11.32   |
| ACa04 | 18 | 40000    | 120000   | 0 | 0 | ROCK1P1,   | ncRNA_ex   | NR_03377.             | . | . | ENST0000 CpG: 21,C  | 18p11.32   |
| ACa04 | 18 | 2670000  | 2690000  | 0 | 0 | SMCHD1     | exonic     | NM_01529.             | . | . | ENST0000.           | 18p11.32   |
| ACa04 | 18 | 9250000  | 9360000  | 0 | 0 | ANKRD12,   | exonic     | NM_00108.             | . | . | ENST0000 CpG: 30,C  | 18p11.22   |
| ACa04 | 18 | 18600000 | 18980000 | 0 | 0 | GREB1L,R   | exonic     | NM_00114.             | . | . | ENST0000 CpG: 118,( | 18q11.1    |
| ACa04 | 18 | 43300000 | 43820000 | 0 | 0 | C18orf25,F | exonic     | NM_00100.             | . | . | ENST0000 CpG: 47,C  | 18q21.1-q1 |
| ACa04 | 18 | 45390000 | 45430000 | 0 | 0 | SMAD2      | exonic     | NM_00100.             | . | . | ENST0000.           | 18q21.1    |
| ACa04 | 18 | 53170000 | 53310000 | 0 | 0 | TCF4       | exonic     | NM_00108.             | . | . | ENST0000 CpG: 30    | 18q21.2    |
| ACa04 | 18 | 53310000 | 53330000 | 0 | 0 | .          | intergenic | NM_00124 dist=6776;v. | . | . | .                   | 18q21.2    |
| ACa04 | 18 | 53330000 | 54820000 | 0 | 0 | RP11-456f  | exonic     | NM_00125.             | . | . | ENST0000 CpG: 24,C  | 18q21.2-q2 |
| ACa04 | 18 | 55210000 | 56040000 | 0 | 0 | RP11-35G   | exonic     | NM_00014.             | . | . | ENST0000 CpG: 32,C  | 18q21.31   |
| ACa04 | 18 | 56040000 | 56120000 | 0 | 0 | NEDD4L,M   | exonic     | NM_00114.             | . | . | ENST0000.           | 18q21.31   |
| ACa04 | 19 | 0        | 60000    | 0 | 0 | .          | downstream | NR_03326.             | . | . | .                   | 19p13.3    |
| ACa04 | 19 | 60000    | 210000   | 0 | 0 | FAM138A,   | exonic     | NM_00100.             | . | . | ENST0000 CpG: 117   | 19p13.3    |
| ACa04 | 21 | 9860000  | 10800000 | 0 | 0 | TEKT4P2    | ncRNA_ex   | NR_03832.             | . | . | ENST0000 CpG: 20,C  | 21p11.2    |
| ACa04 | 21 | 15010000 | 15040000 | 0 | 0 | POTED      | exonic     | NM_17498.             | . | . | ENST0000 CpG: 24,C  | 21q11.2    |
| ACa04 | 21 | 22780000 | 22790000 | 0 | 0 | NCAM2      | exonic     | NM_00454.             | . | . | ENST0000.           | 21q21.1    |
| ACa04 | 21 | 41170000 | 41310000 | 0 | 0 | IGSF5,PCf  | exonic     | NM_00108.             | . | . | ENST0000.           | 21q22.2    |
| ACa04 | 21 | 45010000 | 45040000 | 0 | 0 | MIR6070,F  | exonic     | NM_00703.             | . | . | ENST0000.           | 21q22.3    |
| ACa04 | 22 | 21920000 | 21930000 | 0 | 0 | UBE2L3     | exonic     | NM_00125.             | . | . | ENST0000 CpG: 85    | 22q11.21   |
| ACa04 | X  | 32530000 | 32540000 | 0 | 0 | DMD        | exonic     | NM_00010.             | . | . | ENST0000.           | Xp21.1     |
| ACa04 | X  | 67450000 | 67460000 | 0 | 0 | OPHN1      | exonic     | NM_00254.             | . | . | ENST0000.           | Xq12       |

|         |          |          |          |   |        |           |            |           |              |           |           |                   |
|---------|----------|----------|----------|---|--------|-----------|------------|-----------|--------------|-----------|-----------|-------------------|
| ACa04 X | 1.51E+08 | 1.51E+08 | 0        | 0 | GABRA3 | exonic    | NM_00080.  | .         | .            | ENST0000. | Xq28      |                   |
| ACa06   | 2        | 2.14E+08 | 2.14E+08 | 0 | 0      | MIR4776-2 | ncRNA_ex   | NR_03993. | .            | .         | ENST0000. | 2q34              |
| ACa06   | 3        | 1.24E+08 | 1.24E+08 | 0 | 0      | KALRN,MI  | ncRNA_ex   | NR_04979. | .            | .         | ENST0000. | 3q21.2            |
| ACa06   | 4        | 25140000 | 25240000 | 0 | 0      | SEPSECS   | exonic     | NM_01695. | .            | .         | ENST0000  | CpG: 52,C 4p15.2  |
| ACa06   | 4        | 1.07E+08 | 1.07E+08 | 0 | 0      | .         | ncRNA_ex   | NR_12592. | .            | .         | ENST0000. | 4q24              |
| ACa06   | 4        | 1.13E+08 | 1.13E+08 | 0 | 0      | AP1AR     | exonic     | NM_00112. | .            | .         | ENST0000  | CpG: 106 4q25     |
| ACa06   | 5        | 11360000 | 11400000 | 0 | 0      | CTNND2    | exonic     | NM_00128. | .            | .         | ENST0000  | CpG: 70 5p15.2    |
| ACa06   | 5        | 26980000 | 26990000 | 0 | 0      | CDH9      | exonic     | NM_01627. | .            | .         | ENST0000. | 5p14.1            |
| ACa06   | 5        | 1.7E+08  | 1.7E+08  | 0 | 0      | KCNIP1    | exonic     | NM_00103. | .            | .         | ENST0000. | 5q35.1            |
| ACa06   | 6        | 84380000 | 84390000 | 0 | 0      | SNAP91    | exonic     | NM_00125. | .            | .         | ENST0000. | 6q14.2            |
| ACa06   | 6        | 1.43E+08 | 1.43E+08 | 0 | 0      | GPR126    | exonic     | NM_00103. | .            | .         | ENST0000  | CpG: 91 6q24.1    |
| ACa06   | 6        | 1.71E+08 | 1.71E+08 | 0 | 0      | .         | intergenic | NM_00259  | dist=14622.  | .         | ENST0000. | 6q27              |
| ACa06   | 6        | 1.71E+08 | 1.71E+08 | 0 | 0      | .         | intergenic | NM_00259  | dist=16622.  | .         | .         | 6q27              |
| ACa06   | 7        | 57140000 | 57150000 | 0 | 0      | .         | intergenic | NR_03624  | dist=11642.  | .         | .         | 7p11.2            |
| ACa06   | 8        | 1.32E+08 | 1.32E+08 | 0 | 0      | ADCY8     | exonic     | NM_00111. | .            | .         | ENST0000  | CpG: 208 8q24.22  |
| ACa06   | 9        | 89760000 | 89780000 | 0 | 0      | C9orf170  | exonic     | NM_00100. | .            | .         | ENST0000  | CpG: 40 9q21.33   |
| ACa06   | 9        | 1.26E+08 | 1.27E+08 | 0 | 0      | DENND1A   | exonic     | NM_02094. | .            | .         | ENST0000. | 9q33.3            |
| ACa06   | 10       | 49480000 | 49490000 | 0 | 0      | FRMPD2    | exonic     | NM_00101. | .            | .         | ENST0000. | 10q11.22          |
| ACa06   | 12       | 40220000 | 40430000 | 0 | 0      | SLC2A13   | exonic     | NM_05288. | .            | .         | ENST0000. | 12q12             |
| ACa06   | 12       | 95770000 | 95780000 | 0 | 0      | .         | intergenic | NR_03745  | dist=66240.  | .         | ENST0000. | 12q22             |
| ACa06   | 12       | 1.06E+08 | 1.06E+08 | 0 | 0      | .         | intergenic | NM_00114  | dist=14704.  | .         | ENST0000. | 12q23.3           |
| ACa06   | 13       | 61140000 | 61150000 | 0 | 0      | TDRD3     | exonic     | NM_00114. | .            | .         | ENST0000. | 13q21.2           |
| ACa06   | 13       | 74380000 | 74390000 | 0 | 0      | KLF12     | exonic     | NM_00724. | .            | .         | ENST0000. | 13q22.1           |
| ACa06   | 15       | 58780000 | 58790000 | 0 | 0      | LIPC      | ncRNA_ex   | NR_12033. | .            | .         | ENST0000. | 15q21.3           |
| ACa06   | 15       | 67980000 | 68000000 | 0 | 0      | MAP2K5    | exonic     | NM_00120. | .            | .         | ENST0000. | 15q23             |
| ACa06   | 15       | 68870000 | 68880000 | 0 | 0      | CORO2B    | exonic     | NM_00609. | .            | .         | ENST0000  | CpG: 135 15q23    |
| ACa06   | 15       | 77360000 | 77370000 | 0 | 0      | TSPAN3    | exonic     | NM_00116. | .            | .         | ENST0000  | CpG: 82 15q24.3   |
| ACa06   | 17       | 28570000 | 28580000 | 0 | 0      | BLMH      | exonic     | NM_00038. | .            | .         | ENST0000. | 17q11.2           |
| ACa06   | 17       | 57190000 | 57210000 | 0 | 0      | SKA2      | exonic     | NM_00110. | .            | .         | ENST0000. | 17q22             |
| ACa06   | 18       | 5630000  | 5640000  | 0 | 0      | .         | intergenic | NM_00128  | dist=1010;1. | .         | .         | CpG: 241 18p11.31 |
| ACa06   | 19       | 34010000 | 34020000 | 0 | 0      | PEPD      | exonic     | NM_00028. | .            | .         | ENST0000  | CpG: 71 19q13.11  |
| ACa06   | 19       | 35270000 | 35280000 | 0 | 0      | .         | intergenic | NM_00100  | dist=5866;1. | .         | .         | 19q13.11          |
| ACa06   | 19       | 35870000 | 35880000 | 0 | 0      | .         | intergenic | NM_00530  | dist=18611.  | .         | .         | 19q13.12          |
| ACa06   | 20       | 8130000  | 8140000  | 0 | 0      | PLCB1     | exonic     | NM_01519. | .            | .         | ENST0000. | 20p12.3           |
| ACa06   | 20       | 20390000 | 20400000 | 0 | 0      | RALGAPA   | exonic     | NM_02034. | .            | .         | ENST0000. | 20p11.23          |

|       |    |          |          |   |   |           |            |                      |   |   |                     |            |
|-------|----|----------|----------|---|---|-----------|------------|----------------------|---|---|---------------------|------------|
| ACa06 | 21 | 35440000 | 35520000 | 0 | 0 | SLC5A3,M  | exonic     | NM_00693.            | . | . | ENST0000 CpG: 96    | 21q22.11   |
| ACa06 | X  | 22200000 | 22210000 | 0 | 0 | PHEX      | exonic     | NM_00044.            | . | . | ENST0000.           | Xp22.11    |
| ACa06 | X  | 78150000 | 78160000 | 0 | 0 | MIR4328   | ncRNA_ex   | NR_03625.            | . | . | .                   | Xq21.1     |
| ACa06 | X  | 1.04E+08 | 1.04E+08 | 0 | 0 | IL1RAPL2  | exonic     | NM_01741.            | . | . | ENST0000.           | Xq22.3     |
| ACa06 | X  | 1.14E+08 | 1.14E+08 | 0 | 0 | LRCH2     | exonic     | NM_00124.            | . | . | ENST0000 CpG: 31    | Xq23       |
| ACa07 | 1  | 15250000 | 15260000 | 0 | 0 | KAZN      | exonic     | NM_00101.            | . | . | ENST0000 CpG: 135   | 1p36.21    |
| ACa07 | 1  | 71340000 | 71360000 | 0 | 0 | PTGER3    | intronic   | NM_19871.            | . | . | ENST0000.           | 1p31.1     |
| ACa07 | 1  | 2.4E+08  | 2.41E+08 | 0 | 0 | FMN2      | exonic     | NM_02006.            | . | . | ENST0000 CpG: 26    | 1q43       |
| ACa07 | 2  | 87280000 | 87290000 | 0 | 0 | LOC28507  | ncRNA_ex   | NR_02684.            | . | . | .                   | 2p11.2     |
| ACa07 | 3  | 11420000 | 11750000 | 0 | 0 | VGLL4,AT1 | exonic     | NM_00112.            | . | . | ENST0000 CpG: 22,C  | 3p25.3     |
| ACa07 | 3  | 57190000 | 57210000 | 0 | 0 | IL17RD    | exonic     | NM_01756.            | . | . | ENST0000 CpG: 100,( | 3p14.3     |
| ACa07 | 3  | 1.23E+08 | 1.23E+08 | 0 | 0 | PTPLB,MY  | exonic     | NM_19840.            | . | . | ENST0000 CpG: 64,C  | 3q21.1     |
| ACa07 | 4  | 39000000 | 39050000 | 0 | 0 | KLHL5,TM  | exonic     | NM_02494.            | . | . | ENST0000 CpG: 83    | 4p14       |
| ACa07 | 4  | 1.06E+08 | 1.07E+08 | 0 | 0 | ARHGEF3   | exonic     | NM_00124.            | . | . | ENST0000.           | 4q24       |
| ACa07 | 6  | 38250000 | 38530000 | 0 | 0 | BTBD9     | exonic     | NM_00109.            | . | . | ENST0000.           | 6p21.2     |
| ACa07 | 6  | 47270000 | 47530000 | 0 | 0 | TNFRSF21  | exonic     | NM_01212.            | . | . | ENST0000 CpG: 106,( | 6p12.3     |
| ACa07 | 6  | 1.11E+08 | 1.11E+08 | 0 | 0 | METTL24   | exonic     | NM_00112.            | . | . | ENST0000 CpG: 45,C  | 6q21       |
| ACa07 | 9  | 340000   | 350000   | 0 | 0 | DOCK8     | exonic     | NM_00119.            | . | . | ENST0000.           | 9p24.3     |
| ACa07 | 9  | 6620000  | 7170000  | 0 | 0 | KDM4C,Gl  | exonic     | NM_00017.            | . | . | ENST0000 CpG: 154,( | 9p24.1     |
| ACa07 | 9  | 7170000  | 7180000  | 0 | 0 | KDM4C     | exonic     | NM_00114.            | . | . | ENST0000.           | 9p24.1     |
| ACa07 | 9  | 1.36E+08 | 1.36E+08 | 0 | 0 | AK8       | exonic     | NM_15257.            | . | . | ENST0000.           | 9q34.13    |
| ACa07 | 11 | 1410000  | 1420000  | 0 | 0 | BRSK2     | exonic     | NM_00125.            | . | . | ENST0000 CpG: 170   | 11p15.5    |
| ACa07 | 11 | 68080000 | 68090000 | 0 | 0 | LRP5      | exonic     | NM_00233.            | . | . | ENST0000 CpG: 72    | 11q13.2    |
| ACa07 | 11 | 1.11E+08 | 1.12E+08 | 0 | 0 | SIK2      | exonic     | NM_01519.            | . | . | ENST0000 CpG: 135   | 11q23.1    |
| ACa07 | 11 | 1.3E+08  | 1.3E+08  | 0 | 0 | ST14      | exonic     | NM_02197.            | . | . | ENST0000 CpG: 64    | 11q24.3    |
| ACa07 | 12 | 46140000 | 46170000 | 0 | 0 | ARID2     | intronic   | NM_15264.            | . | . | ENST0000.           | 12q12      |
| ACa07 | 12 | 48210000 | 48220000 | 0 | 0 | HDAC7     | exonic     | NM_00109.            | . | . | ENST0000 CpG: 94    | 12q13.11   |
| ACa07 | 12 | 1.31E+08 | 1.31E+08 | 0 | 0 | RIMBP2    | exonic     | NM_01534.            | . | . | ENST0000.           | 12q24.33   |
| ACa07 | 13 | 1.15E+08 | 1.15E+08 | 0 | 0 | RASA3     | exonic     | NM_00736.            | . | . | ENST0000 CpG: 137   | 13q34      |
| ACa07 | 14 | 63510000 | 63520000 | 0 | 0 | KCNH5     | exonic     | NM_13931.            | . | . | ENST0000 CpG: 92    | 14q23.2    |
| ACa07 | 14 | 89640000 | 89820000 | 0 | 0 | FOXN3     | exonic     | NM_00108.            | . | . | ENST0000.           | 14q31.3-q3 |
| ACa07 | 14 | 91280000 | 91290000 | 0 | 0 | TTC7B     | exonic     | NM_00101.            | . | . | ENST0000 CpG: 42    | 14q32.11   |
| ACa07 | 14 | 1.01E+08 | 1.01E+08 | 0 | 0 | .         | intergenic | NM_02083 dist=13869. | . | . | ENST0000 CpG: 37    | 14q32.2    |
| ACa07 | 15 | 21960000 | 21970000 | 0 | 0 | .         | intergenic | NR_02705 dist=19261. | . | . | ENST0000 CpG: 84    | 15q11.2    |
| ACa07 | 15 | 60820000 | 60860000 | 0 | 0 | RORA      | exonic     | NM_00294.            | . | . | ENST0000.           | 15q22.2    |

|       |    |          |          |   |   |           |            |                       |   |   |                     |          |
|-------|----|----------|----------|---|---|-----------|------------|-----------------------|---|---|---------------------|----------|
| ACa07 | 15 | 76760000 | 76960000 | 0 | 0 | SCAPER    | exonic     | NM_00114.             | . | . | ENST0000.           | 15q24.3  |
| ACa07 | 15 | 77170000 | 77180000 | 0 | 0 | SCAPER    | exonic     | NM_02084.             | . | . | ENST0000.           | 15q24.3  |
| ACa07 | 15 | 1.02E+08 | 1.02E+08 | 0 | 0 | PCSK6     | exonic     | NM_00129.             | . | . | ENST0000 CpG: 176   | 15q26.3  |
| ACa07 | 16 | 12370000 | 12380000 | 0 | 0 | SNX29     | exonic     | NM_03216.             | . | . | ENST0000.           | 16p13.13 |
| ACa07 | 17 | 3860000  | 3870000  | 0 | 0 | ATP2A3    | exonic     | NM_00517.             | . | . | ENST0000 CpG: 104   | 17p13.2  |
| ACa07 | 17 | 55470000 | 55480000 | 0 | 0 | MSI2      | exonic     | NM_13896.             | . | . | ENST0000.           | 17q22    |
| ACa07 | 18 | 77940000 | 78010000 | 0 | 0 | PAR6G     | exonic     | NM_03251.             | . | . | ENST0000 CpG: 122   | 18q23    |
| ACa07 | 18 | 78010000 | 78077248 | 0 | 0 | .         | intergenic | NM_03251 dist=4603;1. | . | . | .                   | 18q23    |
| ACa07 | 19 | 340000   | 350000   | 0 | 0 | MIER2     | exonic     | NM_01755.             | . | . | ENST0000 CpG: 27,C  | 19p13.3  |
| ACa07 | 19 | 2010000  | 2020000  | 0 | 0 | BTBD2     | exonic     | NM_01779.             | . | . | ENST0000.           | 19p13.3  |
| ACa07 | 19 | 2450000  | 2580000  | 0 | 0 | LMNB2,GN  | exonic     | NM_01567.             | . | . | ENST0000 CpG: 180,( | 19p13.3  |
| ACa07 | 19 | 3700000  | 3710000  | 0 | 0 | TJP3,PIP5 | exonic     | NM_00119.             | . | . | ENST0000 CpG: 81    | 19p13.3  |
| ACa07 | 19 | 13100000 | 13110000 | 0 | 0 | NFIX      | exonic     | NM_00250.             | . | . | ENST0000 CpG: 96    | 19p13.2  |
| ACa07 | 19 | 29700000 | 29710000 | 0 | 0 | UQCRFS1   | exonic     | NM_00600.             | . | . | ENST0000 CpG: 91    | 19q12    |
| ACa07 | 19 | 37180000 | 37190000 | 0 | 0 | ZNF567    | exonic     | NM_00130.             | . | . | ENST0000.           | 19q13.12 |
| ACa07 | 19 | 44310000 | 44320000 | 0 | 0 | LYPD5     | intronic   | NM_18257.             | . | . | ENST0000.           | 19q13.31 |
| ACa07 | 19 | 46460000 | 46480000 | 0 | 0 | NOVA2     | exonic     | NM_00251.             | . | . | ENST0000.           | 19q13.32 |
| ACa07 | 20 | 17550000 | 17560000 | 0 | 0 | DSTN      | exonic     | NM_00687.             | . | . | ENST0000 CpG: 101,( | 20p12.1  |
| ACa07 | 20 | 58880000 | 60080000 | 0 | 0 | LOC10050  | exonic     | NM_00125.             | . | . | ENST0000 CpG: 34,C  | 20q13.33 |
| ACa07 | 21 | 9860000  | 10800000 | 0 | 0 | TEKT4P2   | ncRNA_ex   | NR_03832.             | . | . | ENST0000 CpG: 30,C  | 21p11.2  |
| ACa07 | 21 | 19190000 | 19200000 | 0 | 0 | C21orf91  | exonic     | NM_00110.             | . | . | ENST0000 CpG: 108   | 21q21.1  |
| ACa07 | 21 | 33240000 | 33250000 | 0 | 0 | HUNK      | exonic     | NM_01458.             | . | . | ENST0000 CpG: 169   | 21q22.11 |
| ACa07 | 21 | 35440000 | 35450000 | 0 | 0 | MRPS6,SL  | exonic     | NM_03247.             | . | . | ENST0000 CpG: 96    | 21q22.11 |
| ACa07 | 21 | 44070000 | 44080000 | 0 | 0 | PDE9A     | exonic     | NM_00100.             | . | . | ENST0000 CpG: 114   | 21q22.3  |
| ACa07 | 21 | 45130000 | 45140000 | 0 | 0 | PDXK      | exonic     | NM_00368.             | . | . | ENST0000 CpG: 156   | 21q22.3  |
| ACa07 | 22 | 36420000 | 36430000 | 0 | 0 | RBFOX2    | exonic     | NM_00108.             | . | . | ENST0000 CpG: 102   | 22q12.3  |
| ACa07 | 22 | 44250000 | 44260000 | 0 | 0 | SULT4A1   | exonic     | NM_01435.             | . | . | ENST0000 CpG: 68    | 22q13.31 |
| ACa07 | 22 | 47020000 | 47040000 | 0 | 0 | GRAMD4    | exonic     | NM_01512.             | . | . | ENST0000 CpG: 14,C  | 22q13.31 |
| ACa07 | X  | 2410000  | 2430000  | 0 | 0 | DHRXS,ZE  | exonic     | NM_14517.             | . | . | ENST0000 CpG: 55    | Xp22.33  |
| ACaP0 | 1  | 12770000 | 13650000 | 0 | 0 | PRAMEF1   | exonic     | NM_00100.             | . | . | ENST0000.           | 1p36.21  |
| ACaP0 | 2  | 1.12E+08 | 1.13E+08 | 0 | 0 | BCL2L11,1 | exonic     | NM_00120.             | . | . | ENST0000 CpG: 24,C  | 2q13     |
| ACaP0 | 4  | 1.09E+08 | 1.09E+08 | 0 | 0 | RPL34-AS  | ncRNA_ex   | NR_02696.             | . | . | ENST0000.           | 4q25     |
| ACaP0 | 5  | 80410000 | 80430000 | 0 | 0 | RASGRF2   | exonic     | NM_00690.             | . | . | ENST0000.           | 5q14.1   |
| ACaP0 | 5  | 90440000 | 90460000 | 0 | 0 | GPR98     | exonic     | NM_03211.             | . | . | ENST0000.           | 5q14.3   |
| ACaP0 | 6  | 1.49E+08 | 1.49E+08 | 0 | 0 | SASH1     | exonic     | NM_01527.             | . | . | ENST0000.           | 6q24.3   |

|       |    |          |          |   |   |           |          |           |   |   |                     |            |
|-------|----|----------|----------|---|---|-----------|----------|-----------|---|---|---------------------|------------|
| ACaP0 | 7  | 1.38E+08 | 1.38E+08 | 0 | 0 | SVOPL     | exonic   | NM_00113. | . | . | ENST0000.           | 7q34       |
| ACaP0 | 8  | 3430000  | 3450000  | 0 | 0 | CSMD1     | exonic   | NM_03322. | . | . | ENST0000.           | 8p23.2     |
| ACaP0 | 8  | 1.32E+08 | 1.32E+08 | 0 | 0 | ADCY8     | exonic   | NM_00111. | . | . | ENST0000.           | 8q24.22    |
| ACaP0 | 9  | 1.15E+08 | 1.15E+08 | 0 | 0 | PTBP3,MI  | exonic   | NM_00116. | . | . | ENST0000 CpG: 79    | 9q31.3-q32 |
| ACaP0 | 10 | 68130000 | 68140000 | 0 | 0 | CTNNA3    | exonic   | NM_00112. | . | . | ENST0000.           | 10q21.3    |
| ACaP0 | 10 | 96520000 | 96750000 | 0 | 0 | CYP2C19,  | exonic   | NM_00076. | . | . | ENST0000.           | 10q23.33   |
| ACaP0 | 11 | 4590000  | 4610000  | 0 | 0 | OR52I2,C1 | exonic   | NM_00100. | . | . | ENST0000.           | 11p15.4    |
| ACaP0 | 11 | 21550000 | 21560000 | 0 | 0 | NELL1     | exonic   | NM_00128. | . | . | ENST0000.           | 11p15.1    |
| ACaP0 | 11 | 33060000 | 33080000 | 0 | 0 | TCP11L1   | exonic   | NM_00114. | . | . | ENST0000 CpG: 123   | 11p13      |
| ACaP0 | 11 | 33080000 | 33170000 | 0 | 0 | LINC00294 | exonic   | NM_00103. | . | . | ENST0000.           | 11p13      |
| ACaP0 | 12 | 8040000  | 8080000  | 0 | 0 | SLC2A3,Sl | exonic   | NM_00128. | . | . | ENST0000.           | 12p13.31   |
| ACaP0 | 12 | 70910000 | 70970000 | 0 | 0 | PTPRB     | exonic   | NM_00110. | . | . | ENST0000.           | 12q15      |
| ACaP0 | 12 | 93880000 | 93900000 | 0 | 0 | MRPL42    | exonic   | NM_01405. | . | . | ENST0000.           | 12q22      |
| ACaP0 | 12 | 1.13E+08 | 1.13E+08 | 0 | 0 | PTPN11    | exonic   | NM_00283. | . | . | ENST0000.           | 12q24.13   |
| ACaP0 | 12 | 1.17E+08 | 1.17E+08 | 0 | 0 | FBXW8     | exonic   | NM_01217. | . | . | ENST0000.           | 12q24.22   |
| ACaP0 | 13 | 21520000 | 21530000 | 0 | 0 | LINC00367 | ncRNA_ex | NR_10405. | . | . | ENST0000 CpG: 26    | 13q12.11   |
| ACaP0 | 13 | 21530000 | 21610000 | 0 | 0 | LATS2     | exonic   | NM_01457. | . | . | ENST0000 CpG: 58,C  | 13q12.11   |
| ACaP0 | 13 | 24550000 | 24560000 | 0 | 0 | SPATA13   | exonic   | NM_00128. | . | . | ENST0000 CpG: 28    | 13q12.12   |
| ACaP0 | 13 | 24560000 | 24590000 | 0 | 0 | SPATA13   | intronic | NM_00128. | . | . | ENST0000.           | 13q12.12   |
| ACaP0 | 13 | 24590000 | 25550000 | 0 | 0 | ATP12A,Sl | exonic   | NM_00116. | . | . | ENST0000 CpG: 78,C  | 13q12.13-c |
| ACaP0 | 13 | 25550000 | 25800000 | 0 | 0 | AMER2,PA  | exonic   | NM_03097. | . | . | ENST0000 CpG: 184,( | 13q12.13   |
| ACaP0 | 13 | 36370000 | 36690000 | 0 | 0 | MIR548F5, | exonic   | NM_00119. | . | . | ENST0000.           | 13q13.3    |
| ACaP0 | 13 | 36930000 | 36950000 | 0 | 0 | SPG20OS,  | ncRNA_ex | NR_04518. | . | . | ENST0000.           | 13q13.3    |
| ACaP0 | 13 | 73460000 | 73490000 | 0 | 0 | PIBF1     | exonic   | NM_00634. | . | . | ENST0000.           | 13q22.1    |
| ACaP0 | 14 | 31600000 | 31610000 | 0 | 0 | HECTD1    | exonic   | NM_01538. | . | . | ENST0000.           | 14q12      |
| ACaP0 | 14 | 31610000 | 31760000 | 0 | 0 | HECTD1    | exonic   | NM_01538. | . | . | ENST0000 CpG: 144   | 14q12      |
| ACaP0 | 14 | 63240000 | 63320000 | 0 | 0 | KCNH5     | exonic   | NM_13931. | . | . | ENST0000.           | 14q23.2    |
| ACaP0 | 14 | 64550000 | 64690000 | 0 | 0 | MIR548AZ  | exonic   | NM_01518. | . | . | ENST0000.           | 14q23.2    |
| ACaP0 | 14 | 64690000 | 64810000 | 0 | 0 | SYNE2,ES  | exonic   | NM_00104. | . | . | ENST0000 CpG: 48,C  | 14q23.2-q2 |
| ACaP0 | 14 | 68200000 | 68590000 | 0 | 0 | ZFYVE26,l | exonic   | NM_00287. | . | . | ENST0000.           | 14q24.1    |
| ACaP0 | 14 | 70800000 | 70920000 | 0 | 0 | COX16,AD  | exonic   | NM_00120. | . | . | ENST0000 CpG: 25    | 14q24.2    |
| ACaP0 | 14 | 73620000 | 73640000 | 0 | 0 | PSEN1     | exonic   | NM_00002. | . | . | ENST0000.           | 14q24.2    |
| ACaP0 | 14 | 74520000 | 74540000 | 0 | 0 | ALDH6A1,  | exonic   | NM_00127. | . | . | ENST0000.           | 14q24.3    |
| ACaP0 | 14 | 74540000 | 74750000 | 0 | 0 | ALDH6A1,  | exonic   | NM_00102. | . | . | ENST0000 CpG: 196,( | 14q24.3    |
| ACaP0 | 14 | 76180000 | 76350000 | 0 | 0 | TTLL5     | exonic   | NM_01507. | . | . | ENST0000.           | 14q24.3    |

|        |    |          |          |   |   |                     |                     |             |   |                      |                    |         |
|--------|----|----------|----------|---|---|---------------------|---------------------|-------------|---|----------------------|--------------------|---------|
| ACaP0  | 14 | 77300000 | 77320000 | 0 | 0 | C14orf166 exonic    | NM_19428.           | .           | . | ENST0000.            | 14q24.3            |         |
| ACaP0  | 14 | 92080000 | 92100000 | 0 | 0 | CATSPER exonic      | NM_02476.           | .           | . | ENST0000.            | 14q32.12           |         |
| ACaP0  | 15 | 74930000 | 74970000 | 0 | 0 | EDC3 exonic         | NM_00114.           | .           | . | ENST0000.            | 15q24.1            |         |
| ACaP0  | 16 | 70860000 | 71110000 | 0 | 0 | HYDIN exonic        | NM_00119.           | .           | . | ENST0000.            | 16q22.2            |         |
| ACaP0  | 17 | 44320000 | 44630000 | 0 | 0 | LRRC37A2 exonic     | NM_00100.           | .           | . | ENST0000 CpG: 17,C   | 17q21.31           |         |
| ACaP0  | 17 | 65890000 | 65950000 | 0 | 0 | BPTF exonic         | NM_00445.           | .           | . | ENST0000.            | 17q24.2            |         |
| ACaP0  | 18 | 12460000 | 12510000 | 0 | 0 | SPIRE1 exonic       | NM_00112.           | .           | . | ENST0000.            | 18p11.21           |         |
| ACaP0  | 18 | 48500000 | 48520000 | 0 | 0 | ELAC1 exonic        | NM_01869.           | .           | . | ENST0000.            | 18q21.2            |         |
| ACaP0  | 18 | 50960000 | 51010000 | 0 | 0 | DCC exonic          | NM_00521.           | .           | . | ENST0000.            | 18q21.2            |         |
| ACaP0  | 18 | 51010000 | 51030000 | 0 | 0 | DCC exonic          | NM_00521.           | .           | . | ENST0000.            | 18q21.2            |         |
| ACaP0  | 19 | 14900000 | 15000000 | 0 | 0 | OR7A17, O exonic    | NM_00100.           | .           | . | ENST0000.            | 19p13.12           |         |
| ACaP0  | 19 | 48370000 | 48380000 | 0 | 0 | SULT2A1 exonic      | NM_00316.           | .           | . | ENST0000.            | 19q13.33           |         |
| ACaP0  | 19 | 55270000 | 55290000 | 0 | 0 | KIR2DL1 exonic      | NM_01421.           | .           | . | ENST0000.            | 19q13.42           |         |
| ACaP0  | 22 | 24750000 | 24770000 | 0 | 0 | SPECC1L- exonic     | NM_00114.           | .           | . | ENST0000.            | 22q11.23           |         |
| ACaP0  | 22 | 40850000 | 40860000 | 0 | 0 | MKL1 exonic         | NM_00128.           | .           | . | ENST0000.            | 22q13.1            |         |
| ACaP0  | X  | 37910000 | 37920000 | 0 | 0 | SYTL5 exonic        | NM_00116.           | .           | . | ENST0000.            | Xp11.4             |         |
| ACaP0  | X  | 49170000 | 49370000 | 0 | 0 | GAGE12J, exonic     | NM_00104.           | .           | . | ENST0000 CpG: 42,C   | Xp11.23            |         |
| ACaP0: | 1  | 1.44E+08 | 1.5E+08  | 0 | 0 | HIST2H2B exonic     | NM_00056.           | .           | . | ENST0000 CpG: 27,C   | 1q21.2-q21.31      |         |
| ACaP0: | 1  | 1.5E+08  | 1.5E+08  | 0 | 0 | OTUD7B, \ exonic    | NM_00127.           | .           | . | ENST0000 CpG: 35,C   | 1q21.2             |         |
| ACaP0: | 1  | 1.55E+08 | 1.56E+08 | 0 | 0 | CHRNA2, C exonic    | NM_00015.           | .           | . | ENST0000 CpG: 125,(1 | q22-q21.31         |         |
| ACaP0: | 1  | 1.57E+08 | 1.58E+08 | 0 | 0 | ETV3, FCR exonic    | NM_00114.           | .           | . | ENST0000 CpG: 57,C   | 1q23.1             |         |
| ACaP0: | 3  | 16970000 | 16980000 | 0 | 0 | PLCL2, MIF ncRNA_ex | NR_03746.           | .           | . | ENST0000.            | 3p24.3             |         |
| ACaP0: | 4  | 9200000  | 9370000  | 0 | 0 | USP17L22 exonic     | NM_00124.           | .           | . | ENST0000.            | 4p16.1             |         |
| ACaP0: | 6  | 1.61E+08 | 1.61E+08 | 0 | 0 | PLG, LPA exonic     | NM_00030.           | .           | . | ENST0000 CpG: 36     | 6q26               |         |
| ACaP0: | 6  | 1.61E+08 | 1.61E+08 | 0 | 0 | PLG exonic          | NM_00030.           | .           | . | ENST0000.            | 6q26               |         |
| ACaP0: | 8  | 10920000 | 10930000 | 0 | 0 | XKR6 intronic       | NM_17368.           | .           | . | ENST0000 CpG: 16     | 8p23.1             |         |
| ACaP0: | 10 | 1.3E+08  | 1.3E+08  | 0 | 0 | MKI67 exonic        | NM_00114.           | .           | . | ENST0000.            | 10q26.2            |         |
| ACaP0: | 13 | 20980000 | 21080000 | 0 | 0 | MIR4499, C exonic   | NM_01597.           | .           | . | ENST0000 CpG: 72,C   | 13q12.11           |         |
| ACaP0: | 13 | 25270000 | 25290000 | 0 | 0 | ATP12A exonic       | NM_00118.           | .           | . | ENST0000.            | 13q12.12           |         |
| ACaP0: | 14 | 1.06E+08 | 1.06E+08 | 0 | 0 | KIAA0125 ncRNA_ex   | NR_02680.           | .           | . | ENST0000.            | 14q32.33           |         |
| ACaP0: | 14 | 1.06E+08 | 1.07E+08 | 0 | 0 | ADAM6, LI ncRNA_ex  | NR_00222.           | .           | . | ENST0000 CpG: 22,C   | 14q32.33           |         |
| ACaP0: | 14 | 1.07E+08 | 1.07E+08 | 0 | 0 | .                   | intergenic NR_02745 | dist=33847. | . | .                    | 14q32.33           |         |
| ACaP0: | 15 | 1.02E+08 | 1.02E+08 | 0 | 0 | .                   | intergenic NM_15233 | dist=15355. | . | .                    | ENST0000 CpG: 87,C | 15q26.3 |
| ACaP0: | 16 | 52580000 | 52590000 | 0 | 0 | CASC16, T exonic    | NM_00108.           | .           | . | ENST0000 CpG: 98,C   | 16q12.1            |         |
| ACaP0: | 18 | 10450000 | 10460000 | 0 | 0 | APCDD1 exonic       | NM_15300.           | .           | . | ENST0000 CpG: 91,C   | 18p11.22           |         |

|         |    |          |          |   |   |                   |                      |   |   |                               |
|---------|----|----------|----------|---|---|-------------------|----------------------|---|---|-------------------------------|
| ACaP0:  | 20 | 25590000 | 31840000 | 0 | 0 | DEFB116,lexonic   | NM_00100.            | . | . | ENST0000 CpG: 43,C 20p11.21-f |
| ACaP0:  | 20 | 35150000 | 35890000 | 0 | 0 | RBL1,TGIF exonic  | NM_00104.            | . | . | ENST0000 CpG: 38,C 20q11.23   |
| ACaP0:X |    | 49170000 | 49370000 | 0 | 0 | GAGE12C exonic    | NM_00104.            | . | . | ENST0000 CpG: 42,C Xp11.23    |
| ACaP0:  | 1  | 1380000  | 1450000  | 0 | 0 | ATAD3C,A exonic   | NM_00103.            | . | . | ENST0000 CpG: 27,C 1p36.33    |
| ACaP0:  | 1  | 1.44E+08 | 1.45E+08 | 0 | 0 | NBPF8,NB exonic   | NM_00103.            | . | . | ENST0000 CpG: 86,C 1q21.1     |
| ACaP0:  | 1  | 1.45E+08 | 1.45E+08 | 0 | 0 | NBPF8,NB UTR3     | NM_00103NM_00103.    | . | . | ENST0000. 1q21.1              |
| ACaP0:  | 1  | 1.45E+08 | 1.45E+08 | 0 | 0 | NBPF20,N exonic   | NM_00100.            | . | . | ENST0000 CpG: 116,(1q21.1     |
| ACaP0:  | 1  | 1.45E+08 | 1.45E+08 | 0 | 0 | NBPF9,PD intronic | NM_00127.            | . | . | ENST0000 CpG: 42 1q21.1       |
| ACaP0:  | 1  | 1.45E+08 | 1.45E+08 | 0 | 0 | NBPF10,N exonic   | NM_00103.            | . | . | ENST0000 CpG: 41,C 1q21.1     |
| ACaP0:  | 1  | 1.45E+08 | 1.45E+08 | 0 | 0 | NBPF20,N ncRNA_ex | NR_10421.            | . | . | ENST0000 CpG: 27,C 1q21.1     |
| ACaP0:  | 1  | 1.5E+08  | 1.5E+08  | 0 | 0 | HIST2H2A exonic   | NM_00100.            | . | . | ENST0000 CpG: 288,(1q21.2     |
| ACaP0:  | 1  | 1.5E+08  | 1.5E+08  | 0 | 0 | HIST2H2B exonic   | NM_00103.            | . | . | ENST0000 CpG: 86,C 1q21.2     |
| ACaP0:  | 1  | 1.55E+08 | 1.55E+08 | 0 | 0 | ADAR,CHf exonic   | NM_00102.            | . | . | ENST0000. 1q21.3              |
| ACaP0:  | 1  | 1.56E+08 | 1.56E+08 | 0 | 0 | MSTO2P,\ exonic   | NM_00119.            | . | . | ENST0000 CpG: 63 1q22         |
| ACaP0:  | 1  | 1.56E+08 | 1.56E+08 | 0 | 0 | DAP3,YY1 exonic   | NM_00119.            | . | . | ENST0000 CpG: 128 1q22        |
| ACaP0:  | 1  | 2.28E+08 | 2.28E+08 | 0 | 0 | GJC2,C1oi exonic  | NM_00085.            | . | . | ENST0000 CpG: 24,C 1q42.13    |
| ACaP0:  | 1  | 2.28E+08 | 2.28E+08 | 0 | 0 | OBSCN,C' exonic   | NM_00109.            | . | . | ENST0000 CpG: 23,C 1q42.13    |
| ACaP0:  | 2  | 2.2E+08  | 2.2E+08  | 0 | 0 | NHEJ1,ZF exonic   | NM_00100.            | . | . | ENST0000 CpG: 68,C 2q35       |
| ACaP0:  | 3  | 1.72E+08 | 1.72E+08 | 0 | 0 | TNFSF10,lexonic   | NM_00114.            | . | . | ENST0000. 3q26.31             |
| ACaP0:  | 4  | 9200000  | 9210000  | 0 | 0 | . intergenic      | NM_00104 dist=24787. | . | . | . 4p16.1                      |
| ACaP0:  | 4  | 9210000  | 9370000  | 0 | 0 | USP17L19 exonic   | NM_00124.            | . | . | ENST0000. 4p16.1              |
| ACaP0:  | 4  | 13460000 | 13540000 | 0 | 0 | LINC01097 exonic  | NM_00101.            | . | . | ENST0000 CpG: 132,(4p15.33    |
| ACaP0:  | 4  | 13540000 | 13590000 | 0 | 0 | BOD1L1,N exonic   | NM_00118.            | . | . | ENST0000 CpG: 218,(4p15.33    |
| ACaP0:  | 4  | 1.91E+08 | 1.91E+08 | 0 | 0 | DUX4,DU exonic    | NM_00112.            | . | . | ENST0000 CpG: 2005 4q35.2     |
| ACaP0:  | 5  | 150000   | 320000   | 0 | 0 | LOC10246 exonic   | NM_00108.            | . | . | ENST0000 CpG: 117,(5p15.33    |
| ACaP0:  | 5  | 3610000  | 31930000 | 0 | 0 | PRDM9,PI exonic   | NM_00103.            | . | . | ENST0000 CpG: 54,C 5p15.1-p15 |
| ACaP0:  | 5  | 31930000 | 32060000 | 0 | 0 | PDZD2,Mll exonic  | NM_17814.            | . | . | ENST0000. 5p13.3              |
| ACaP0:  | 5  | 32060000 | 45470000 | 0 | 0 | C5orf28,U exonic  | NM_00006.            | . | . | ENST0000 CpG: 129,(5p13.2-p13 |
| ACaP0:  | 6  | 26010000 | 26430000 | 0 | 0 | BTN3A1,H exonic   | NM_00041.            | . | . | ENST0000 CpG: 35,C 6p22.2     |
| ACaP0:  | 6  | 26430000 | 26630000 | 0 | 0 | ABT1,BTN exonic   | NM_00119.            | . | . | ENST0000 CpG: 72,C 6p22.2     |
| ACaP0:  | 6  | 26630000 | 27120000 | 0 | 0 | ZNF322,HI exonic  | NM_00124.            | . | . | ENST0000 CpG: 74,C 6p22.1-p22 |
| ACaP0:  | 6  | 33150000 | 33290000 | 0 | 0 | RXRβ,COI exonic   | NM_00107.            | . | . | ENST0000 CpG: 97,C 6p21.32    |
| ACaP0:  | 6  | 80810000 | 80840000 | 0 | 0 | BCKDHB exonic     | NM_00005.            | . | . | ENST0000 CpG: 53 6q14.1       |
| ACaP0:  | 6  | 1.61E+08 | 1.61E+08 | 0 | 0 | LPA exonic        | NM_00557.            | . | . | ENST0000. 6q26                |
| ACaP0:  | 7  | 5680000  | 6190000  | 0 | 0 | USP42,AN exonic   | NM_00053.            | . | . | ENST0000 CpG: 59,C 7p22.1     |



|        |    |          |          |   |   |           |            |                      |   |   |                     |            |
|--------|----|----------|----------|---|---|-----------|------------|----------------------|---|---|---------------------|------------|
| ACaP0: | 7  | 56180000 | 56190000 | 0 | 0 | NUPR1L    | exonic     | NM_00114.            | . | . | ENST0000 CpG: 63    | 7p11.2     |
| ACaP0: | 7  | 56190000 | 56450000 | 0 | 0 | .         | intergenic | NM_00114 dist=5910;  | . | . | ENST0000 CpG: 40,C  | 7p11.2     |
| ACaP0: | 7  | 1.44E+08 | 1.44E+08 | 0 | 0 | ARHGEF3   | exonic     | NM_00100.            | . | . | ENST0000 CpG: 52,C  | 7q35       |
| ACaP0: | 8  | 6870000  | 7140000  | 0 | 0 | DEFA11P,  | exonic     | NM_00104.            | . | . | ENST0000 CpG: 60,C  | 8p23.1     |
| ACaP0: | 8  | 37410000 | 37460000 | 0 | 0 | .         | intergenic | NM_00103 dist=61635. | . | . | ENST0000.           | 8p11.23    |
| ACaP0: | 8  | 39130000 | 39340000 | 0 | 0 | ADAM32,A  | exonic     | NM_14500.            | . | . | ENST0000.           | 8p11.22    |
| ACaP0: | 8  | 62480000 | 62500000 | 0 | 0 | ASPH      | exonic     | NM_00116.            | . | . | ENST0000.           | 8q12.3     |
| ACaP0: | 8  | 62500000 | 63160000 | 0 | 0 | ASPH,MIR  | exonic     | NM_00116.            | . | . | ENST0000 CpG: 37,C  | 8q12.3     |
| ACaP0: | 8  | 86550000 | 86840000 | 0 | 0 | REXO1L2f  | ncRNA_ex   | NR_00359.            | . | . | ENST0000 CpG: 130,( | 8q21.2     |
| ACaP0: | 8  | 1.25E+08 | 1.25E+08 | 0 | 0 | TMEM65    | exonic     | NM_19429.            | . | . | ENST0000 CpG: 158   | 8q24.13    |
| ACaP0: | 8  | 1.46E+08 | 1.46E+08 | 0 | 0 | RECQL4,C  | exonic     | NM_00100.            | . | . | ENST0000 CpG: 104,( | 8q24.3     |
| ACaP0: | 8  | 1.46E+08 | 1.46E+08 | 0 | 0 | ARHGAP3   | intronic   | NM_02525.            | . | . | ENST0000 CpG: 20,C  | 8q24.3     |
| ACaP0: | 9  | 35650000 | 35830000 | 0 | 0 | SPAG8,TL  | exonic     | NM_00101.            | . | . | ENST0000 CpG: 42,C  | 9p13.3     |
| ACaP0: | 9  | 1.4E+08  | 1.4E+08  | 0 | 0 | LCN15,SN  | exonic     | NM_00100.            | . | . | ENST0000 CpG: 21,C  | 9q34.3     |
| ACaP0: | 11 | 57060000 | 57960000 | 0 | 0 | OR911,TM  | exonic     | NM_00006.            | . | . | ENST0000 CpG: 90,C  | 11q12.1    |
| ACaP0: | 11 | 1.19E+08 | 1.19E+08 | 0 | 0 | VPS11,TR  | exonic     | NM_00019.            | . | . | ENST0000 CpG: 88,C  | 11q23.3    |
| ACaP0: | 14 | 23340000 | 23380000 | 0 | 0 | LRP10,RE  | exonic     | NM_00107.            | . | . | ENST0000 CpG: 64,C  | 14q11.2    |
| ACaP0: | 14 | 23380000 | 23440000 | 0 | 0 | RP11-298l | exonic     | NM_00103.            | . | . | ENST0000 CpG: 50,C  | 14q11.2    |
| ACaP0: | 14 | 24560000 | 24710000 | 0 | 0 | PCK2,TINf | exonic     | NM_00100.            | . | . | ENST0000 CpG: 102,( | 14q11.2-q1 |
| ACaP0: | 15 | 67700000 | 67790000 | 0 | 0 | IQCH,IQCf | exonic     | NM_00103.            | . | . | ENST0000.           | 15q23      |
| ACaP0: | 15 | 75540000 | 75590000 | 0 | 0 | GOLGA6C   | exonic     | NM_00114.            | . | . | ENST0000.           | 15q24.2    |
| ACaP0: | 15 | 90770000 | 90790000 | 0 | 0 | CIB1,GDPf | exonic     | NM_00101.            | . | . | ENST0000 CpG: 82    | 15q26.1    |
| ACaP0: | 15 | 1.02E+08 | 1.02E+08 | 0 | 0 | .         | intergenic | NM_15233 dist=5355;  | . | . | ENST0000.           | 15q26.3    |
| ACaP0: | 16 | 14330000 | 14350000 | 0 | 0 | MKL2      | exonic     | NM_01404.            | . | . | ENST0000.           | 16p13.12   |
| ACaP0: | 16 | 29380000 | 29550000 | 0 | 0 | BOLA2B,S  | exonic     | NM_00101.            | . | . | ENST0000 CpG: 159,( | 16p11.2    |
| ACaP0: | 16 | 30200000 | 30350000 | 0 | 0 | LOC38824  | exonic     | NM_00101.            | . | . | ENST0000 CpG: 94,C  | 16p11.2    |
| ACaP0: | 16 | 30350000 | 30380000 | 0 | 0 | CD2BP2,T  | exonic     | NM_00124.            | . | . | ENST0000 CpG: 52    | 16p11.2    |
| ACaP0: | 16 | 74360000 | 74460000 | 0 | 0 | CLEC18B,  | exonic     | NM_00101.            | . | . | ENST0000 CpG: 110,( | 16q23.1    |
| ACaP0: | 17 | 0        | 60000    | 0 | 0 | LOC10050  | exonic     | NM_00358.            | . | . | ENST0000 CpG: 212,( | 17p13.3    |
| ACaP0: | 19 | 33430000 | 33670000 | 0 | 0 | WDR88,Cf  | exonic     | NM_01802.            | . | . | ENST0000 CpG: 124,( | 19q13.11   |
| ACaP0: | 19 | 55240000 | 55290000 | 0 | 0 | KIR2DL3,k | exonic     | NM_01421.            | . | . | ENST0000.           | 19q13.42   |
| ACaP0: | 20 | 17630000 | 17650000 | 0 | 0 | RRBP1     | exonic     | NM_00104.            | . | . | ENST0000.           | 20p12.1    |
| ACaP0: | 20 | 35710000 | 35870000 | 0 | 0 | MROH8,RI  | exonic     | NM_00113.            | . | . | ENST0000 CpG: 70,C  | 20q11.23   |
| ACaP0: | 20 | 35870000 | 36010000 | 0 | 0 | RPN2,GHf  | exonic     | NM_00100.            | . | . | ENST0000 CpG: 65,C  | 20q11.23   |
| ACaP0: | 22 | 21470000 | 21830000 | 0 | 0 | POM121Lf  | exonic     | NM_00112.            | . | . | ENST0000 CpG: 48,C  | 22q11.21   |

|         |          |          |          |   |   |                  |            |          |             |                     |                |
|---------|----------|----------|----------|---|---|------------------|------------|----------|-------------|---------------------|----------------|
| ACaP0:  | 22       | 25010000 | 25030000 | 0 | 0 | GGT1,BCF exonic  | NM_00103.  | .        | .           | ENST0000.           | 22q11.23       |
| ACaP0:  | 22       | 36350000 | 36930000 | 0 | 0 | MYH9,APC exonic  | NM_00108.  | .        | .           | ENST0000 CpG: 48,C  | 22q12.3        |
| ACaP0:X | 31080000 | 37550000 |          | 0 | 0 | XK,CHDC2 exonic  | NM_00010.  | .        | .           | ENST0000 CpG: 20,C  | Xp21.2-Xp22.3  |
| ACaP0:  | 1        | 55530000 | 1.1E+08  | 0 | 0 | PPAP2B,L exonic  | NM_00001.  | .        | .           | ENST0000 CpG: 90,C  | 1p31.2-p32.2   |
| ACaP0:  | 1        | 1.48E+08 | 1.5E+08  | 0 | 0 | RP11-14N1 exonic | NM_00103.  | .        | .           | ENST0000 CpG: 63,C  | 1q21.2         |
| ACaP0:  | 1        | 1.84E+08 | 2.01E+08 | 0 | 0 | CDC73,RC exonic  | NM_00018.  | .        | .           | ENST0000 CpG: 55,C  | 1q31.2-q32.2   |
| ACaP0:  | 2        | 29110000 | 29160000 | 0 | 0 | SNORD53 exonic   | NM_01513.  | .        | .           | ENST0000 CpG: 79    | 2p23.2         |
| ACaP0:  | 2        | 31750000 | 70150000 | 0 | 0 | AC007392 exonic  | NM_00010.  | .        | .           | ENST0000 CpG: 180,( | 2p13.3-p23.2   |
| ACaP0:  | 2        | 96500000 | 96650000 | 0 | 0 | .                | intergenic | NR_10373 | dist=7271;( | ENST0000.           | 2q11.1         |
| ACaP0:  | 2        | 97770000 | 98200000 | 0 | 0 | AC159540 exonic  | NM_00116.  | .        | .           | ENST0000 CpG: 105   | 2q11.2         |
| ACaP0:  | 2        | 1.09E+08 | 1.09E+08 | 0 | 0 | RANBP2,L exonic  | NM_00119.  | .        | .           | ENST0000 CpG: 105,( | 2q12.3         |
| ACaP0:  | 2        | 1.09E+08 | 1.1E+08  | 0 | 0 | CCDC138, exonic  | NM_00626.  | .        | .           | ENST0000 CpG: 73    | 2q12.3         |
| ACaP0:  | 2        | 1.14E+08 | 1.16E+08 | 0 | 0 | AC104653 exonic  | NM_00100.  | .        | .           | ENST0000 CpG: 51,C  | 2q14.1-q14.2   |
| ACaP0:  | 2        | 1.39E+08 | 1.61E+08 | 0 | 0 | EPC2,ZEB exonic  | NM_00040.  | .        | .           | ENST0000 CpG: 92,C  | 2q22.2-q23.2   |
| ACaP0:  | 2        | 1.61E+08 | 1.61E+08 | 0 | 0 | LY75-CD31 exonic | NM_00119.  | .        | .           | ENST0000 CpG: 74    | 2q24.2         |
| ACaP0:  | 2        | 1.61E+08 | 1.61E+08 | 0 | 0 | PLA2R1 exonic    | NM_00100.  | .        | .           | ENST0000.           | 2q24.2         |
| ACaP0:  | 2        | 1.88E+08 | 1.9E+08  | 0 | 0 | MIR1245B exonic  | NM_00009.  | .        | .           | ENST0000 CpG: 108   | 2q32.2-q33.2   |
| ACaP0:  | 2        | 2.03E+08 | 2.03E+08 | 0 | 0 | CDK15 exonic     | NM_00126.  | .        | .           | ENST0000.           | 2q33.1         |
| ACaP0:  | 2        | 2.03E+08 | 2.03E+08 | 0 | 0 | CDK15,FZ exonic  | NM_00126.  | .        | .           | ENST0000 CpG: 338   | 2q33.1         |
| ACaP0:  | 3        | 0        | 7790000  | 0 | 0 | CHL1,CNT exonic  | NM_00056.  | .        | .           | ENST0000 CpG: 67,C  | 3p26.1-p26.2   |
| ACaP0:  | 3        | 14970000 | 37830000 | 0 | 0 | SLC4A7,Z1 exonic | NM_00006.  | .        | .           | ENST0000 CpG: 84,C  | 3p22.3-p22.4   |
| ACaP0:  | 3        | 53880000 | 1E+08    | 0 | 0 | STX19,ZN1 exonic | NM_00009.  | .        | .           | ENST0000 CpG: 105,( | 3p14.1-p14.2   |
| ACaP0:  | 3        | 1E+08    | 1E+08    | 0 | 0 | TFG,ABI3E exonic | NM_00100.  | .        | .           | ENST0000.           | 3q12.2         |
| ACaP0:  | 3        | 1E+08    | 1.01E+08 | 0 | 0 | ABI3BP exonic    | NM_01542.  | .        | .           | ENST0000.           | 3q12.2         |
| ACaP0:  | 3        | 1.3E+08  | 1.32E+08 | 0 | 0 | NPHP3-AC exonic  | NM_00100.  | .        | .           | ENST0000 CpG: 29,C  | 3q22.1         |
| ACaP0:  | 4        | 0        | 50000    | 0 | 0 | .                | intergenic | NONE,NM  | dist=NONE.  | ENST0000.           | 4p16.3         |
| ACaP0:  | 4        | 50000    | 290000   | 0 | 0 | ZNF876P,z exonic | NM_00103.  | .        | .           | ENST0000 CpG: 46,C  | 4p16.3         |
| ACaP0:  | 4        | 290000   | 360000   | 0 | 0 | ZNF141 exonic    | NM_00344.  | .        | .           | ENST0000 CpG: 156,( | 4p16.3         |
| ACaP0:  | 4        | 360000   | 440000   | 0 | 0 | ZNF721,Z1 exonic | NM_00344.  | .        | .           | ENST0000 CpG: 38    | 4p16.3         |
| ACaP0:  | 4        | 5520000  | 5530000  | 0 | 0 | C4orf6 exonic    | NM_00575.  | .        | .           | ENST0000.           | 4p16.2         |
| ACaP0:  | 4        | 10440000 | 17720000 | 0 | 0 | FGFBP1,B exonic  | NM_00032.  | .        | .           | ENST0000 CpG: 24,C  | 4p15.32-p15.33 |
| ACaP0:  | 4        | 17790000 | 17910000 | 0 | 0 | DCAF16,N exonic  | NM_00116.  | .        | .           | ENST0000 CpG: 107   | 4p15.32-p15.33 |
| ACaP0:  | 4        | 40930000 | 40950000 | 0 | 0 | APBB2 exonic     | NM_00116.  | .        | .           | ENST0000.           | 4p14           |
| ACaP0:  | 4        | 42020000 | 42060000 | 0 | 0 | SLC30A9 exonic   | NM_00634.  | .        | .           | ENST0000.           | 4p13           |
| ACaP0:  | 4        | 42060000 | 42140000 | 0 | 0 | BEND4,SL exonic  | NM_00115.  | .        | .           | ENST0000.           | 4p13           |

|       |   |          |          |   |   |                  |                       |   |   |                     |            |
|-------|---|----------|----------|---|---|------------------|-----------------------|---|---|---------------------|------------|
| ACaP0 | 4 | 47860000 | 47980000 | 0 | 0 | CNGA1,NF exonic  | NM_00008.             | . | . | ENST0000 CpG: 86    | 4p12       |
| ACaP0 | 4 | 47980000 | 48060000 | 0 | 0 | NIPAL1,CN exonic | NM_20733.             | . | . | ENST0000 CpG: 73    | 4p12       |
| ACaP0 | 4 | 48610000 | 48630000 | 0 | 0 | FRYL exonic      | NM_01503.             | . | . | ENST0000.           | 4p11       |
| ACaP0 | 4 | 68680000 | 68800000 | 0 | 0 | TMPRSS1 exonic   | NM_00111.             | . | . | ENST0000.           | 4q13.2     |
| ACaP0 | 4 | 68800000 | 68910000 | 0 | 0 | TMPRSS1 exonic   | NM_00111.             | . | . | ENST0000.           | 4q13.2     |
| ACaP0 | 4 | 68910000 | 69320000 | 0 | 0 | SYT14L,LC exonic | NM_00103.             | . | . | ENST0000 CpG: 27,C  | 4q13.2     |
| ACaP0 | 4 | 71680000 | 71770000 | 0 | 0 | MOB1B,Gf exonic  | NM_00109.             | . | . | ENST0000 CpG: 107,( | 4q13.3     |
| ACaP0 | 4 | 76570000 | 76740000 | 0 | 0 | USO1,G3E exonic  | NM_00371.             | . | . | ENST0000 CpG: 126,( | 4q21.1     |
| ACaP0 | 4 | 76740000 | 76870000 | 0 | 0 | NAAA,PPE exonic  | NM_00104.             | . | . | ENST0000 CpG: 133   | 4q21.1     |
| ACaP0 | 4 | 77910000 | 77940000 | 0 | 0 | 11-Sep exonic    | NM_01824.             | . | . | ENST0000.           | 4q21.1     |
| ACaP0 | 4 | 77940000 | 78650000 | 0 | 0 | CXCL13,C exonic  | NM_00128.             | . | . | ENST0000 CpG: 147,( | 4q21.1     |
| ACaP0 | 4 | 96190000 | 1.06E+08 | 0 | 0 | SLC9B1,C exonic  | NM_00025.             | . | . | ENST0000 CpG: 155,( | 4q24-q22.3 |
| ACaP0 | 4 | 1.09E+08 | 1.09E+08 | 0 | 0 | HADH exonic      | NM_00118.             | . | . | ENST0000.           | 4q25       |
| ACaP0 | 4 | 1.1E+08  | 1.11E+08 | 0 | 0 | CFI,SEC24 exonic | NM_00020.             | . | . | ENST0000 CpG: 117,( | 4q25       |
| ACaP0 | 4 | 1.11E+08 | 1.11E+08 | 0 | 0 | GAR1,RR1 exonic  | NM_00658.             | . | . | ENST0000 CpG: 23    | 4q25       |
| ACaP0 | 4 | 1.13E+08 | 1.21E+08 | 0 | 0 | PDE5A,NE exonic  | NM_00013.             | . | . | ENST0000 CpG: 28,C  | 4q26-q25   |
| ACaP0 | 4 | 1.21E+08 | 1.22E+08 | 0 | 0 | TNIP3,ND1 exonic | NM_00112.             | . | . | ENST0000 CpG: 112,( | 4q27       |
| ACaP0 | 4 | 1.22E+08 | 1.24E+08 | 0 | 0 | CCNA2,IL2 exonic | NM_00058.             | . | . | ENST0000 CpG: 160,( | 4q27       |
| ACaP0 | 4 | 1.24E+08 | 1.24E+08 | 0 | 0 | NUDT6,FG exonic  | NM_00200.             | . | . | ENST0000.           | 4q28.1-q27 |
| ACaP0 | 4 | 1.24E+08 | 1.24E+08 | 0 | 0 | NUDT6 exonic     | NM_00708.             | . | . | ENST0000.           | 4q28.1     |
| ACaP0 | 4 | 1.41E+08 | 1.41E+08 | 0 | 0 | SCOC,RP1 exonic  | NM_00115.             | . | . | ENST0000 CpG: 55    | 4q31.1     |
| ACaP0 | 4 | 1.44E+08 | 1.44E+08 | 0 | 0 | USP38,GA exonic  | NM_00203.             | . | . | ENST0000 CpG: 18,C  | 4q31.21    |
| ACaP0 | 4 | 1.53E+08 | 1.58E+08 | 0 | 0 | KIAA0922, exonic | NM_00050.             | . | . | ENST0000 CpG: 21,C  | 4q31.3-q32 |
| ACaP0 | 4 | 1.58E+08 | 1.58E+08 | 0 | 0 | GRIA2 exonic     | NM_00082.             | . | . | ENST0000.           | 4q32.1     |
| ACaP0 | 4 | 1.65E+08 | 1.65E+08 | 0 | 0 | 1-Mar exonic     | NM_00116.             | . | . | ENST0000.           | 4q32.3     |
| ACaP0 | 4 | 1.69E+08 | 1.69E+08 | 0 | 0 | DDX60L,D exonic  | NM_00101.             | . | . | ENST0000 CpG: 27    | 4q32.3     |
| ACaP0 | 4 | 1.69E+08 | 1.69E+08 | 0 | 0 | DDX60L exonic    | NM_00101.             | . | . | ENST0000.           | 4q32.3     |
| ACaP0 | 4 | 1.71E+08 | 1.71E+08 | 0 | 0 | AADAT exonic     | NM_00128.             | . | . | ENST0000.           | 4q33       |
| ACaP0 | 4 | 1.78E+08 | 1.78E+08 | 0 | 0 | VEGFC exonic     | NM_00542.             | . | . | ENST0000 CpG: 113   | 4q34.3     |
| ACaP0 | 4 | 1.91E+08 | 1.91E+08 | 0 | 0 | LOC10028 exonic  | NM_00100.             | . | . | ENST0000 CpG: 95,C  | 4q35.2     |
| ACaP0 | 4 | 1.91E+08 | 1.91E+08 | 0 | 0 | . intergenic     | NM_03317 dist=6558;1. | . | . | .                   | 4q35.2     |
| ACaP0 | 5 | 36100000 | 68720000 | 0 | 0 | LOC10192 exonic  | NM_00006.             | . | . | ENST0000 CpG: 100,( | 5p12-q12.1 |
| ACaP0 | 5 | 70750000 | 1.31E+08 | 0 | 0 | ST8SIA4,M exonic | NM_00003.             | . | . | ENST0000 CpG: 33,C  | 5q21.2-q21 |
| ACaP0 | 5 | 1.7E+08  | 1.71E+08 | 0 | 0 | FGF18,NP exonic  | NM_00103.             | . | . | ENST0000 CpG: 96,C  | 5q35.1     |
| ACaP0 | 6 | 17600000 | 17780000 | 0 | 0 | NUP153,K exonic  | NM_00110.             | . | . | ENST0000 CpG: 86,C  | 6p22.3     |

|       |    |          |          |   |   |           |            |                    |   |   |                     |            |
|-------|----|----------|----------|---|---|-----------|------------|--------------------|---|---|---------------------|------------|
| ACaP0 | 6  | 42530000 | 42650000 | 0 | 0 | UBR2      | exonic     | NM_00118.          | . | . | ENST0000 CpG: 29    | 6p21.1     |
| ACaP0 | 6  | 44280000 | 55920000 | 0 | 0 | SLC25A27  | exonic     | NM_00025.          | . | . | ENST0000 CpG: 50,C  | 6p12.1-p12 |
| ACaP0 | 6  | 55920000 | 57060000 | 0 | 0 | KIAA1586, | exonic     | NM_00103.          | . | . | ENST0000 CpG: 73,C  | 6p11.2-p12 |
| ACaP0 | 6  | 64380000 | 89550000 | 0 | 0 | CNR1,COI  | exonic     | NM_00005.          | . | . | ENST0000 CpG: 58,C  | 6q14.3-q15 |
| ACaP0 | 6  | 89550000 | 89830000 | 0 | 0 | RNGTT,SF  | exonic     | NM_00128.          | . | . | ENST0000 CpG: 60,C  | 6q15       |
| ACaP0 | 6  | 89830000 | 89960000 | 0 | 0 | PM20D2,G  | exonic     | NM_00101.          | . | . | ENST0000 CpG: 109   | 6q15       |
| ACaP0 | 6  | 1.08E+08 | 1.38E+08 | 0 | 0 | SNX3,SER  | exonic     | NM_00004.          | . | . | ENST0000 CpG: 152,( | 6q23.3-q24 |
| ACaP0 | 6  | 1.39E+08 | 1.5E+08  | 0 | 0 | SF3B5,GP  | exonic     | NM_00100.          | . | . | ENST0000 CpG: 44,C  | 6q24.1-q24 |
| ACaP0 | 7  | 1.02E+08 | 1.03E+08 | 0 | 0 | FAM185A,  | exonic     | NM_00111.          | . | . | ENST0000 CpG: 51    | 7q22.1     |
| ACaP0 | 7  | 1.07E+08 | 1.25E+08 | 0 | 0 | ST7,CAV1  | exonic     | NM_00010.          | . | . | ENST0000 CpG: 59,C  | 7q31.1-q31 |
| ACaP0 | 8  | 38850000 | 39680000 | 0 | 0 | ADAM32,L  | exonic     | NM_00102.          | . | . | ENST0000 CpG: 47,C  | 8p11.22    |
| ACaP0 | 8  | 48950000 | 86390000 | 0 | 0 | MRPL15,C  | exonic     | NM_00006.          | . | . | ENST0000 CpG: 34,C  | 8q21.13-q1 |
| ACaP0 | 8  | 88220000 | 95540000 | 0 | 0 | FAM92A1,  | exonic     | NM_00100.          | . | . | ENST0000 CpG: 44,C  | 8q21.3-q22 |
| ACaP0 | 9  | 0        | 10000    | 0 | 0 | .         | intergenic | NONE,NR_dist=NONE. | . | . | .                   | 9p24.3     |
| ACaP0 | 9  | 10000    | 180000   | 0 | 0 | DDX11L5,l | exonic     | NM_00114.          | . | . | ENST0000 CpG: 69,C  | 9p24.3     |
| ACaP0 | 9  | 180000   | 13100000 | 0 | 0 | INSL6,SLC | exonic     | NM_00017.          | . | . | ENST0000 CpG: 39,C  | 9p24.1-p24 |
| ACaP0 | 9  | 13100000 | 13260000 | 0 | 0 | MPDZ      | exonic     | NM_00126.          | . | . | ENST0000.           | 9p23       |
| ACaP0 | 9  | 13260000 | 32510000 | 0 | 0 | ZDHHC21,  | exonic     | NM_00007.          | . | . | ENST0000 CpG: 61,C  | 9p21.1-p21 |
| ACaP0 | 9  | 42360000 | 42720000 | 0 | 0 | FOXD4L4,  | exonic     | NM_00101.          | . | . | ENST0000 CpG: 112,( | 9p12       |
| ACaP0 | 9  | 42750000 | 44410000 | 0 | 0 | RP11-381( | exonic     | NM_00101.          | . | . | ENST0000 CpG: 27,C  | 9p11.2-p12 |
| ACaP0 | 9  | 67920000 | 71090000 | 0 | 0 | FOXD4L3,  | exonic     | NM_00101.          | . | . | ENST0000 CpG: 29,C  | 9q13-q21.1 |
| ACaP0 | 9  | 94970000 | 95300000 | 0 | 0 | ASPN,MIR  | exonic     | NM_00101.          | . | . | ENST0000 CpG: 64,C  | 9q22.31    |
| ACaP0 | 9  | 1.02E+08 | 1.12E+08 | 0 | 0 | OR13C9,N  | exonic     | NM_00003.          | . | . | ENST0000 CpG: 31,C  | 9q31.2-q22 |
| ACaP0 | 10 | 15550000 | 22680000 | 0 | 0 | STAM,EBL  | exonic     | NM_00072.          | . | . | ENST0000 CpG: 112,( | 10p12.2-p1 |
| ACaP0 | 10 | 31130000 | 38270000 | 0 | 0 | ZEB1-AS1  | exonic     | NM_00102.          | . | . | ENST0000 CpG: 20,C  | 10p11.22-p |
| ACaP0 | 10 | 51020000 | 51050000 | 0 | 0 | PARG      | exonic     | NM_00363.          | . | . | ENST0000.           | 10q11.23   |
| ACaP0 | 10 | 51050000 | 51250000 | 0 | 0 | AGAP8,PA  | exonic     | NM_00107.          | . | . | ENST0000 CpG: 18    | 10q11.23   |
| ACaP0 | 10 | 1.06E+08 | 1.23E+08 | 0 | 0 | MIR4483,S | exonic     | NM_00014.          | . | . | ENST0000 CpG: 57,C  | 10q26.11-c |
| ACaP0 | 11 | 20380000 | 43970000 | 0 | 0 | CCDC73,L  | exonic     | NM_00028.          | . | . | ENST0000 CpG: 20,C  | 11p13-p14  |
| ACaP0 | 11 | 1.11E+08 | 1.17E+08 | 0 | 0 | NCAM1-A(  | exonic     | NM_00003.          | . | . | ENST0000 CpG: 110,( | 11q23.3-q2 |
| ACaP0 | 12 | 8320000  | 8810000  | 0 | 0 | LINC00937 | exonic     | NM_00100.          | . | . | ENST0000 CpG: 75,C  | 12p13.31   |
| ACaP0 | 12 | 8810000  | 8980000  | 0 | 0 | MFAP5,RII | exonic     | NM_00348.          | . | . | ENST0000 CpG: 171   | 12p13.31   |
| ACaP0 | 12 | 8980000  | 9750000  | 0 | 0 | MIR1244-2 | exonic     | NM_00001.          | . | . | ENST0000 CpG: 41,C  | 12p13.31   |
| ACaP0 | 12 | 14590000 | 24050000 | 0 | 0 | SLCO1B1,  | exonic     | NM_00041.          | . | . | ENST0000 CpG: 121,( | 12p12.2-p1 |
| ACaP0 | 12 | 44400000 | 45280000 | 0 | 0 | TMEM117,  | exonic     | NM_00114.          | . | . | ENST0000 CpG: 82    | 12q12      |

|        |    |          |          |   |   |           |            |           |             |   |          |               |            |
|--------|----|----------|----------|---|---|-----------|------------|-----------|-------------|---|----------|---------------|------------|
| ACaP0  | 12 | 58330000 | 1.07E+08 | 0 | 0 | PLXNC1,G  | exonic     | NM_00023. | .           | . | ENST0000 | CpG: 64,C     | 12q21.32-c |
| ACaP0  | 13 | 32690000 | 38230000 | 0 | 0 | LINC0042  | exonic     | NM_00005. | .           | . | ENST0000 | CpG: 43,C     | 13q13.2-q1 |
| ACaP0  | 13 | 80090000 | 80130000 | 0 | 0 | NDFIP2    | exonic     | NM_00116. | .           | . | ENST0000 | .             | 13q31.1    |
| ACaP0  | 13 | 96320000 | 96690000 | 0 | 0 | DNAJC3,U  | exonic     | NM_00626. | .           | . | ENST0000 | CpG: 117      | 13q32.1    |
| ACaP0  | 14 | 25320000 | 35330000 | 0 | 0 | AKAP6,SC  | exonic     | NM_00103. | .           | . | ENST0000 | CpG: 50,C     | 14q12-q13  |
| ACaP0  | 14 | 35330000 | 35530000 | 0 | 0 | SRP54,IGf | exonic     | NM_00107. | .           | . | ENST0000 | CpG: 183,(14q | 13.2       |
| ACaP0  | 14 | 35530000 | 50300000 | 0 | 0 | MIR4503,F | exonic     | NM_00100. | .           | . | ENST0000 | CpG: 123,(14q | 21.3-q2    |
| ACaP0  | 14 | 76170000 | 76250000 | 0 | 0 | TTLL5     | exonic     | NM_01507. | .           | . | ENST0000 | .             | 14q24.3    |
| ACaP0  | 14 | 80120000 | 91600000 | 0 | 0 | EFCAB11,  | exonic     | NM_00015. | .           | . | ENST0000 | CpG: 240,(14q | 31.3-q2    |
| ACaP0  | 14 | 1.01E+08 | 1.01E+08 | 0 | 0 | SNORD11   | ncRNA_ex   | NR_00319. | .           | . | ENST0000 | .             | 14q32.2-q2 |
| ACaP0  | 15 | 42480000 | 42500000 | 0 | 0 | VPS39,MIF | exonic     | NM_01528. | .           | . | ENST0000 | .             | 15q15.1    |
| ACaP0  | 15 | 42500000 | 42550000 | 0 | 0 | TMEM87A   | exonic     | NM_00128. | .           | . | ENST0000 | CpG: 35       | 15q15.1    |
| ACaP0  | 16 | 33950000 | 48650000 | 0 | 0 | LINC0027  | exonic     | NM_00029. | .           | . | ENST0000 | CpG: 117,(16p | 11.2-q1    |
| ACaP0  | 17 | 18670000 | 18750000 | 0 | 0 | FBXW10,T  | exonic     | NM_00126. | .           | . | ENST0000 | CpG: 42       | 17p11.2    |
| ACaP0  | 17 | 18750000 | 18800000 | 0 | 0 | PRPSAP2   | exonic     | NM_00124. | .           | . | ENST0000 | CpG: 49       | 17p11.2    |
| ACaP0  | 18 | 14120000 | 20740000 | 0 | 0 | ANKRD20,  | exonic     | NM_00110. | .           | . | ENST0000 | CpG: 23,C     | 18p11.21-c |
| ACaP0  | 18 | 20740000 | 20930000 | 0 | 0 | TMEM241,  | exonic     | NM_00110. | .           | . | ENST0000 | .             | 18q11.2    |
| ACaP0  | 18 | 20930000 | 30530000 | 0 | 0 | AQP4-AS1  | exonic     | NM_00022. | .           | . | ENST0000 | CpG: 89,C     | 18q11.2-q1 |
| ACaP0  | 19 | 36800000 | 38380000 | 0 | 0 | ZNF540,Zf | exonic     | NM_00101. | .           | . | ENST0000 | CpG: 36,C     | 19q13.13-c |
| ACaP0  | 20 | 2670000  | 2690000  | 0 | 0 | EBF4      | exonic     | NM_00111. | .           | . | ENST0000 | CpG: 178      | 20p13      |
| ACaP0  | 20 | 5980000  | 6000000  | 0 | 0 | LOC10192  | exonic     | NM_00112. | .           | . | ENST0000 | CpG: 104      | 20p12.3    |
| ACaP0  | 20 | 58410000 | 58520000 | 0 | 0 | PHACTR3,  | exonic     | NM_00119. | .           | . | ENST0000 | CpG: 154,(20q | 13.33      |
| ACaP0  | 21 | 34000000 | 34150000 | 0 | 0 | SYNJ1,C2  | exonic     | NM_00116. | .           | . | ENST0000 | CpG: 109,(21q | 22.11      |
| ACaP0  | 22 | 18650000 | 18880000 | 0 | 0 | USP18,GC  | exonic     | NM_01741. | .           | . | ENST0000 | CpG: 41,C     | 22q11.21   |
| ACaP0! | 2  | 0        | 87140000 | 0 | 0 | VAMP8,Rf  | exonic     | NM_00010. | .           | . | ENST0000 | CpG: 98,C     | 2p22.2-p22 |
| ACaP0! | 3  | 0        | 240000   | 0 | 0 | CHL1      | UTR5       | NM_00125  | NM_00125.   | . | ENST0000 | CpG: 171      | 3p26.3     |
| ACaP0! | 3  | 64420000 | 64440000 | 0 | 0 | .         | intergenic | NM_19885  | dist=20886. | . | ENST0000 | CpG: 67       | 3p14.1     |
| ACaP0! | 4  | 1.11E+08 | 1.11E+08 | 0 | 0 | ENPEP     | exonic     | NM_00197. | .           | . | ENST0000 | .             | 4q25       |
| ACaP0! | 4  | 1.75E+08 | 1.78E+08 | 0 | 0 | ADAM29,A  | exonic     | NM_00086. | .           | . | ENST0000 | CpG: 34,C     | 4q34.1-q34 |
| ACaP0! | 5  | 1.56E+08 | 1.56E+08 | 0 | 0 | HAVCR1    | exonic     | NM_00109. | .           | . | ENST0000 | .             | 5q33.3     |
| ACaP0! | 5  | 1.56E+08 | 1.57E+08 | 0 | 0 | HAVCR2    | exonic     | NM_03278. | .           | . | ENST0000 | .             | 5q33.3     |
| ACaP0! | 8  | 87380000 | 87430000 | 0 | 0 | WWP1      | exonic     | NM_00701. | .           | . | ENST0000 | .             | 8q21.3     |
| ACaP0! | 12 | 8050000  | 8340000  | 0 | 0 | ZNF705A,f | exonic     | NM_00100. | .           | . | ENST0000 | CpG: 42,C     | 12p13.31   |
| ACaP0! | 12 | 8340000  | 8370000  | 0 | 0 | FAM66C    | ncRNA_ex   | NR_02678. | .           | . | ENST0000 | .             | 12p13.31   |
| ACaP0! | 13 | 96670000 | 96690000 | 0 | 0 | UGGT2     | exonic     | NM_02012. | .           | . | ENST0000 | .             | 13q32.1    |

|          |    |          |          |   |   |           |            |                       |   |   |                     |            |
|----------|----|----------|----------|---|---|-----------|------------|-----------------------|---|---|---------------------|------------|
| ACaP0!   | 14 | 26910000 | 27070000 | 0 | 0 | NOVA1     | exonic     | NM_00251.             | . | . | ENST0000 CpG: 24    | 14q12      |
| ACaP0!   | 14 | 94670000 | 94680000 | 0 | 0 | PPP4R4    | exonic     | NM_02095.             | . | . | ENST0000.           | 14q32.12   |
| ACaP0!   | 14 | 1.04E+08 | 1.04E+08 | 0 | 0 | CKB,TRM1  | exonic     | NM_00182.             | . | . | ENST0000 CpG: 44,C  | 14q32.33-c |
| ACaP0!   | 15 | 30370000 | 31100000 | 0 | 0 | DKFZP434  | exonic     | NM_00103.             | . | . | ENST0000 CpG: 274,( | 15q13.2    |
| ACaP0!   | 15 | 32450000 | 32900000 | 0 | 0 | GOLGA8N   | exonic     | NM_00074.             | . | . | ENST0000 CpG: 78,C  | 15q13.3    |
| ACaP0!   | 15 | 36870000 | 36880000 | 0 | 0 | C15orf41  | exonic     | NM_00113.             | . | . | ENST0000 CpG: 35    | 15q14      |
| ACaP0!   | 15 | 36880000 | 36900000 | 0 | 0 | C15orf41  | intronic   | NM_00113.             | . | . | ENST0000.           | 15q14      |
| ACaP0!   | 15 | 36900000 | 36990000 | 0 | 0 | C15orf41  | exonic     | NM_00113.             | . | . | ENST0000.           | 15q14      |
| ACaP0!   | 15 | 36990000 | 37010000 | 0 | 0 | C15orf41  | exonic     | NM_00113.             | . | . | ENST0000.           | 15q14      |
| ACaP0!   | 15 | 82720000 | 83200000 | 0 | 0 | RPS17,UB  | exonic     | NM_00102.             | . | . | ENST0000 CpG: 21,C  | 15q25.2    |
| ACaP0!   | 15 | 83200000 | 83350000 | 0 | 0 | RPS17,RP  | exonic     | NM_00102.             | . | . | ENST0000 CpG: 95,C  | 15q25.2    |
| ACaP0!   | 15 | 84830000 | 85060000 | 0 | 0 | GOLGA6L   | exonic     | NM_00124.             | . | . | ENST0000 CpG: 88,C  | 15q25.2    |
| ACaP0!   | 15 | 1.02E+08 | 1.02E+08 | 0 | 0 | .         | intergenic | NM_15233 dist=15355.  | . | . | ENST0000 CpG: 87    | 15q26.3    |
| ACaP0!   | 18 | 50760000 | 50770000 | 0 | 0 | DCC       | intronic   | NM_00521.             | . | . | ENST0000.           | 18q21.2    |
| ACaP0!   | 20 | 29940000 | 35890000 | 0 | 0 | GHRH,PSI  | exonic     | NM_00017.             | . | . | ENST0000 CpG: 47,C  | 20q11.21-c |
| ACaP0!   | 21 | 9820000  | 9830000  | 0 | 0 | MIR3648,I | ncRNA_ex   | NR_03742.             | . | . | ENST0000 CpG: 120   | 21p11.2    |
| ACaP0! X |    | 8990000  | 31830000 | 0 | 0 | ASB9,RPS  | exonic     | NM_00010.             | . | . | ENST0000 CpG: 86,C  | Xp22.12-X  |
| ACaP0! X |    | 31830000 | 33150000 | 0 | 0 | DMD       | exonic     | NM_00010.             | . | . | ENST0000.           | Xp21.1     |
| ACaP0! X |    | 33150000 | 44390000 | 0 | 0 | CXorf38,M | exonic     | NM_00010.             | . | . | ENST0000 CpG: 54,C  | Xp11.4-Xp  |
| ACaP0! X |    | 49290000 | 52940000 | 0 | 0 | XAGE1D,I  | exonic     | NM_00008.             | . | . | ENST0000 CpG: 60,C  | Xp11.23-X  |
| ACaP0!   | 1  | 12850000 | 12860000 | 0 | 0 | PRAMEF1   | exonic     | NM_02301.             | . | . | ENST0000.           | 1p36.21    |
| ACaP0!   | 1  | 12860000 | 12880000 | 0 | 0 | .         | intergenic | NM_02301 dist=3223;t. | . | . | .                   | 1p36.21    |
| ACaP0!   | 1  | 12880000 | 13720000 | 0 | 0 | LOC64933  | exonic     | NM_00100.             | . | . | ENST0000.           | 1p36.21    |
| ACaP0!   | 1  | 91730000 | 91860000 | 0 | 0 | HFM1      | exonic     | NM_00101.             | . | . | ENST0000.           | 1p22.2     |
| ACaP0!   | 1  | 1.2E+08  | 1.2E+08  | 0 | 0 | HSD3BP4,  | exonic     | NM_00019.             | . | . | ENST0000 CpG: 127,( | 1p12       |
| ACaP0!   | 1  | 1.2E+08  | 1.21E+08 | 0 | 0 | ADAM30,I  | exonic     | NM_00120.             | . | . | ENST0000 CpG: 21,C  | 1p12       |
| ACaP0!   | 1  | 1.21E+08 | 1.48E+08 | 0 | 0 | GJA5,RNF  | exonic     | NM_00100.             | . | . | ENST0000 CpG: 19,C  | 1p12-q12   |
| ACaP0!   | 1  | 1.48E+08 | 1.48E+08 | 0 | 0 | NBPF8,MII | ncRNA_ex   | NR_02746.             | . | . | ENST0000 CpG: 16,C  | 1q21.2     |
| ACaP0!   | 1  | 1.48E+08 | 1.5E+08  | 0 | 0 | NBPF15,N  | exonic     | NM_00056.             | . | . | ENST0000 CpG: 94,C  | 1q21.2     |
| ACaP0!   | 1  | 1.5E+08  | 1.5E+08  | 0 | 0 | HIST2H2B  | exonic     | NM_00103.             | . | . | ENST0000 CpG: 86,C  | 1q21.2     |
| ACaP0!   | 1  | 1.5E+08  | 1.52E+08 | 0 | 0 | CTSK,C1o  | exonic     | NM_00039.             | . | . | ENST0000 CpG: 53,C  | 1q21.2-q21 |
| ACaP0!   | 1  | 1.58E+08 | 1.58E+08 | 0 | 0 | FCRL5     | exonic     | NM_00119.             | . | . | ENST0000.           | 1q23.1     |
| ACaP0!   | 1  | 2.45E+08 | 2.49E+08 | 0 | 0 | OR2L5,AH  | exonic     | NM_00100.             | . | . | ENST0000 CpG: 65,C  | 1q44       |
| ACaP0!   | 2  | 87120000 | 88330000 | 0 | 0 | RGPD1,AN  | exonic     | NM_00102.             | . | . | ENST0000 CpG: 31,C  | 2p11.2     |
| ACaP0!   | 2  | 88330000 | 88360000 | 0 | 0 | KRCC1     | UTR5       | NM_01661 NM_01661.    | . | . | ENST0000 CpG: 60    | 2p11.2     |

|        |   |          |          |   |   |           |            |           |             |   |           |                      |
|--------|---|----------|----------|---|---|-----------|------------|-----------|-------------|---|-----------|----------------------|
| ACaP0l | 2 | 89310000 | 89320000 | 0 | 0 | .         | intergenic | NR_03963  | dist=19803. | . | ENST0000. | 2p11.2               |
| ACaP0l | 2 | 89320000 | 95520000 | 0 | 0 | FAM95A,G  | ncRNA_ex   | NR_00336. | .           | . | ENST0000  | CpG: 121,(2p11.1-q11 |
| ACaP0l | 2 | 95520000 | 95530000 | 0 | 0 | ANKRD20,  | ncRNA_ex   | NR_00336. | .           | . | ENST0000  | CpG: 120,(2q11.1     |
| ACaP0l | 2 | 1.09E+08 | 1.09E+08 | 0 | 0 | RANBP2,C  | exonic     | NM_00626. | .           | . | ENST0000  | CpG: 73 2q12.3       |
| ACaP0l | 2 | 1.09E+08 | 1.1E+08  | 0 | 0 | EDAR,CC   | exonic     | NM_02233. | .           | . | ENST0000. | 2q12.3               |
| ACaP0l | 2 | 1.33E+08 | 1.61E+08 | 0 | 0 | RIF1,AC   | exonic     | NM_00040. | .           | . | ENST0000  | CpG: 187,(2q21.3-q23 |
| ACaP0l | 2 | 1.71E+08 | 1.71E+08 | 0 | 0 | UBR3,PH   | exonic     | NM_00119. | .           | . | ENST0000  | CpG: 72,C 2q31.1     |
| ACaP0l | 2 | 1.71E+08 | 1.78E+08 | 0 | 0 | OLA1,AC   | exonic     | NM_00007. | .           | . | ENST0000  | CpG: 47,C 2q31.2-q31 |
| ACaP0l | 2 | 2.01E+08 | 2.02E+08 | 0 | 0 | CASP10,S  | exonic     | NM_00108. | .           | . | ENST0000  | CpG: 53,C 2q33.1     |
| ACaP0l | 2 | 2.21E+08 | 2.33E+08 | 0 | 0 | LINC00471 | exonic     | NM_00009. | .           | . | ENST0000  | CpG: 242,(2q37.1-q38 |
| ACaP0l | 3 | 42130000 | 45150000 | 0 | 0 | CLEC3B,Z  | exonic     | NM_00072. | .           | . | ENST0000  | CpG: 29,C 3p21.33-p2 |
| ACaP0l | 3 | 45150000 | 45750000 | 0 | 0 | CDCP1,SA  | exonic     | NM_01401. | .           | . | ENST0000  | CpG: 21,C 3p21.31    |
| ACaP0l | 3 | 45750000 | 45860000 | 0 | 0 | SACM1L,S  | exonic     | NM_01401. | .           | . | ENST0000  | CpG: 88 3p21.31      |
| ACaP0l | 3 | 57610000 | 57850000 | 0 | 0 | SLMAP,DE  | exonic     | NM_00715. | .           | . | ENST0000  | CpG: 116,(3p14.3     |
| ACaP0l | 3 | 57850000 | 57990000 | 0 | 0 | SLMAP     | exonic     | NM_00715. | .           | . | ENST0000. | 3p14.3               |
| ACaP0l | 3 | 1.09E+08 | 1.09E+08 | 0 | 0 | MORC1,Fl  | exonic     | NM_01442. | .           | . | ENST0000  | CpG: 36 3q13.13      |
| ACaP0l | 3 | 1.23E+08 | 1.24E+08 | 0 | 0 | CCDC14,N  | exonic     | NM_02275. | .           | . | ENST0000  | CpG: 68,C 3q21.1     |
| ACaP0l | 3 | 1.28E+08 | 1.29E+08 | 0 | 0 | KIAA1257, | exonic     | NM_00017. | .           | . | ENST0000  | CpG: 37,C 3q22.1-q21 |
| ACaP0l | 3 | 1.29E+08 | 1.29E+08 | 0 | 0 | TMCC1     | UTR3       | NM_00101  | NM_00101.   | . | ENST0000  | CpG: 65 3q22.1       |
| ACaP0l | 3 | 1.29E+08 | 1.93E+08 | 0 | 0 | PIK3CA,LC | exonic     | NM_00005. | .           | . | ENST0000  | CpG: 136,(3q22.2-q22 |
| ACaP0l | 3 | 1.93E+08 | 1.93E+08 | 0 | 0 | ATP13A5,  | exonic     | NM_03227. | .           | . | ENST0000. | 3q29                 |
| ACaP0l | 3 | 1.93E+08 | 1.93E+08 | 0 | 0 | .         | upstream   | NM_01556. | .           | . | ENST0000. | 3q29                 |
| ACaP0l | 3 | 1.93E+08 | 1.96E+08 | 0 | 0 | FAM43A,L  | exonic     | NM_00101. | .           | . | ENST0000  | CpG: 108,(3q29       |
| ACaP0l | 3 | 1.96E+08 | 1.96E+08 | 0 | 0 | .         | intergenic | NR_00326  | dist=12850. | . | .         | 3q29                 |
| ACaP0l | 3 | 1.96E+08 | 1.98E+08 | 0 | 0 | UBXN7,LR  | exonic     | NM_00099. | .           | . | ENST0000  | CpG: 57,C 3q29       |
| ACaP0l | 3 | 1.98E+08 | 1.98E+08 | 0 | 0 | ANKRD18I  | ncRNA_ex   | NR_00329. | .           | . | ENST0000  | CpG: 25,C 3q29       |
| ACaP0l | 3 | 1.98E+08 | 1.98E+08 | 0 | 0 | FAM157A   | exonic     | NM_00114. | .           | . | ENST0000  | CpG: 27,C 3q29       |
| ACaP0l | 3 | 1.98E+08 | 1.98E+08 | 0 | 0 | .         | intergenic | NM_00114  | dist=52272. | . | .         | 3q29                 |
| ACaP0l | 4 | 9270000  | 9380000  | 0 | 0 | USP17L25  | exonic     | NM_00124. | .           | . | ENST0000. | 4p16.1               |
| ACaP0l | 4 | 76520000 | 76740000 | 0 | 0 | CDKL2,US  | exonic     | NM_00371. | .           | . | ENST0000  | CpG: 76,C 4q21.1     |
| ACaP0l | 4 | 76740000 | 83740000 | 0 | 0 | CXCL9,NU  | exonic     | NM_00100. | .           | . | ENST0000  | CpG: 111,(4q21.22-q2 |
| ACaP0l | 4 | 83740000 | 83910000 | 0 | 0 | THAP9,LIN | exonic     | NM_00107. | .           | . | ENST0000  | CpG: 34,C 4q21.22    |
| ACaP0l | 4 | 83910000 | 84210000 | 0 | 0 | COPS4,CC  | exonic     | NM_00113. | .           | . | ENST0000  | CpG: 64,C 4q21.23-q2 |
| ACaP0l | 4 | 1.29E+08 | 1.29E+08 | 0 | 0 | LARP1B    | exonic     | NM_00127. | .           | . | ENST0000. | 4q28.2               |
| ACaP0l | 4 | 1.43E+08 | 1.44E+08 | 0 | 0 | INPP4B,U  | exonic     | NM_00110. | .           | . | ENST0000  | CpG: 121,(4q31.21    |

|        |      |                      |               |           |   |                  |                      |   |   |                               |
|--------|------|----------------------|---------------|-----------|---|------------------|----------------------|---|---|-------------------------------|
| ACaP0i | 5    | 3500000              | 68870000      | 0         | 0   | GAPT,EGF exonic  | NM_00006.            | . | . | ENST0000 CpG: 134,(5p15.33-q1 |
| ACaP0i | 730i | 3                    | 65370000 gain | AAA       | -1  |                  |                      |   |   |                               |
| ACaP0i | 5    | 68870000             | 70960000      | 0         | 0   | GUSBP9,5 exonic  | NM_00034.            | . | . | ENST0000 CpG: 61,C 5q13.2     |
| ACaP0i | 5    | 70960000             | 82770000      | 0         | 0   | CKMT2-A5 exonic  | NM_00004.            | . | . | ENST0000 CpG: 27,C 5q14.2-q15 |
| ACaP0i | 5    | 82770000             | 82790000      | 0         | 0   | VCAN exonic      | NM_00112.            | . | . | ENST0000 CpG: 39 5q14.2       |
| ACaP0i | 5    | 1.56E+08             | 1.57E+08      | 0         | 0   | TIMD4,FAI exonic | NM_00103.            | . | . | ENST0000 CpG: 36,C 5q33.3     |
| ACaP0i | 5    | 1.8E+08              | 1.8E+08       | 0         | 0   | BTNL8 exonic     | NM_00104.            | . | . | ENST0000 . 5q35.3             |
| ACaP0i | 5    | 1.81E+08             | 1.81E+08      | 0         | 0   | LOC10013 exonic  | NM_00100.            | . | . | ENST0000 CpG: 243,(5q35.3     |
| ACaP0i | 5    | 1.81E+08             | 1.81E+08      | 0         | 0   | . intergenic     | NM_00100 dist=10477. | . | . | . . 5q35.3                    |
| ACaP0i | 6    | 10430000             | 25990000      | 0         | 0   | TDP2,TRII exonic | NM_00033.            | . | . | ENST0000 CpG: 34,C 6p23-p24.3 |
| ACaP0i | 6    | 70380000             | 1.56E+08      | 0         | 0   | GSTM2P1. exonic  | NM_00004.            | . | . | ENST00000606998.1,ENST0000    |
| ACaP0i | ENi  | CpG: 93,C 6q14.1-q25 | Score=0.9i    | Score=650 | esv2656528,esv2678613,esv2732520,esv2732451,esv2665536,nsv510902,esv28643,esv2669643,es |                  |                      |   |   |                               |
| ACaP0i | 823i | 3                    | 85360000 gain | AAA       | -1  |                  |                      |   |   |                               |
| ACaP0i | 7    | 57020000             | 63360000      | 0         | 0   | MIR4283-2 exonic | NM_00115.            | . | . | ENST0000 CpG: 139,(7q11.1-p11 |
| ACaP0i | 7    | 72430000             | 72720000      | 0         | 0   | LOC10010 exonic  | NM_00116.            | . | . | ENST0000 CpG: 77,C 7q11.23    |
| ACaP0i | 7    | 74180000             | 75150000      | 0         | 0   | NCF1,PM5 exonic  | NM_00026.            | . | . | ENST0000 CpG: 51,C 7q11.23    |
| ACaP0i | 7    | 75930000             | 76690000      | 0         | 0   | ZP3,UPK3 exonic  | NM_00110.            | . | . | ENST0000 CpG: 22,C 7q11.23    |
| ACaP0i | 7    | 1.02E+08             | 1.02E+08      | 0         | 0   | SPDYE2B, exonic  | NM_00103.            | . | . | ENST0000 CpG: 37,C 7q22.1     |
| ACaP0i | 7    | 1.02E+08             | 1.03E+08      | 0         | 0   | PSMC2,PI exonic  | NM_00103.            | . | . | ENST0000 CpG: 99,C 7q22.1     |
| ACaP0i | 7    | 1.03E+08             | 1.03E+08      | 0         | 0   | SLC26A5 exonic   | NM_00116.            | . | . | ENST0000 . 7q22.1             |
| ACaP0i | 7    | 1.4E+08              | 1.4E+08       | 0         | 0   | TBXAS1 exonic    | NM_00106.            | . | . | ENST0000 . 7q34               |
| ACaP0i | 8    | 0                    | 10000         | 0         | 0   | . intergenic     | NONE,NM dist=NONE.   | . | . | . . 8p23.3                    |
| ACaP0i | 8    | 10000                | 190000        | 0         | 0   | OR4F21,R exonic  | NM_00100.            | . | . | ENST0000 CpG: 109,(8p23.3     |
| ACaP0i | 8    | 190000               | 280000        | 0         | 0   | ZNF596 exonic    | NM_00104.            | . | . | ENST0000 CpG: 40,C 8p23.3     |
| ACaP0i | 8    | 19190000             | 19460000      | 0         | 0   | CSGALNA exonic   | NM_00113.            | . | . | ENST0000 CpG: 20,C 8p21.3     |
| ACaP0i | 8    | 25040000             | 25720000      | 0         | 0   | DOCK5,EE exonic  | NM_00082.            | . | . | ENST0000 CpG: 97,C 8p21.2     |
| ACaP0i | 8    | 87060000             | 1.42E+08      | 0         | 0   | OC90,MIR exonic  | NM_00012.            | . | . | ENST0000 CpG: 55,C 8q22.2-q24 |
| ACaP0i | 9    | 33530000             | 34180000      | 0         | 0   | UBE2R2,L exonic  | NM_00117.            | . | . | ENST0000 CpG: 18,C 9p13.3     |
| ACaP0i | 9    | 34180000             | 34240000      | 0         | 0   | UBAP1 exonic     | NM_00117.            | . | . | ENST0000 . 9p13.3             |
| ACaP0i | 9    | 39070000             | 70920000      | 0         | 0   | LINC01185 exonic | NM_00101.            | . | . | ENST0000 CpG: 103,(9p11.1-q13 |
| ACaP0i | 9    | 70920000             | 70990000      | 0         | 0   | FOXD4L3, exonic  | NM_02196.            | . | . | ENST0000 CpG: 100,(9q21.11    |
| ACaP0i | 9    | 70990000             | 77360000      | 0         | 0   | TRPM3,PF exonic  | NM_00014.            | . | . | ENST0000 CpG: 177,(9q21.13-q2 |
| ACaP0i | 9    | 1.02E+08             | 1.14E+08      | 0         | 0   | GRIN3A,TI exonic | NM_00003.            | . | . | ENST0000 CpG: 49,C 9q31.1-q31 |
| ACaP0i | 9    | 1.14E+08             | 1.14E+08      | 0         | 0   | OR2K2,KI/ exonic | NM_00108.            | . | . | ENST0000 . 9q31.3             |
| ACaP0i | 9    | 1.17E+08             | 1.29E+08      | 0         | 0   | DENND1A exonic   | NM_00017.            | . | . | ENST0000 CpG: 89,C 9q33.3-q35 |



|        |    |          |          |   |   |           |            |                    |   |   |                               |
|--------|----|----------|----------|---|---|-----------|------------|--------------------|---|---|-------------------------------|
| ACaP0l | 9  | 1.33E+08 | 1.33E+08 | 0 | 0 | FNBP1     | exonic     | NM_01503.          | . | . | ENST0000 CpG: 26,C 9q34.11    |
| ACaP0l | 10 | 48030000 | 49620000 | 0 | 0 | FRMPD2P   | exonic     | NM_00101.          | . | . | ENST0000 CpG: 111,(10q11.22   |
| ACaP0l | 10 | 49620000 | 49680000 | 0 | 0 | MAPK8,AF  | exonic     | NM_00125.          | . | . | ENST0000 CpG: 86,C 10q11.22   |
| ACaP0l | 10 | 96490000 | 96750000 | 0 | 0 | CYP2C19,  | exonic     | NM_00076.          | . | . | ENST0000. 10q23.33            |
| ACaP0l | 10 | 1.16E+08 | 1.16E+08 | 0 | 0 | ABLIM1    | exonic     | NM_00231.          | . | . | ENST0000. 10q25.3             |
| ACaP0l | 10 | 1.3E+08  | 1.3E+08  | 0 | 0 | MKI67     | exonic     | NM_00114.          | . | . | ENST0000. 10q26.2             |
| ACaP0l | 11 | 0        | 80000    | 0 | 0 | .         | intergenic | NONE,NR_dist=NONE. | . | . | . 11p15.5                     |
| ACaP0l | 11 | 80000    | 140000   | 0 | 0 | LINC01001 | ncRNA_ex   | NR_02832.          | . | . | ENST0000 CpG: 30 11p15.5      |
| ACaP0l | 11 | 18250000 | 18590000 | 0 | 0 | SAA1,SAA  | exonic     | NM_00033.          | . | . | ENST0000 CpG: 52,C 11p15.1    |
| ACaP0l | 11 | 18590000 | 18720000 | 0 | 0 | SPTY2D1,  | exonic     | NM_00104.          | . | . | ENST0000 CpG: 38,C 11p15.1    |
| ACaP0l | 11 | 62850000 | 63170000 | 0 | 0 | SLC22A9,  | exonic     | NM_00103.          | . | . | ENST0000. 11q12.3             |
| ACaP0l | 11 | 63170000 | 63520000 | 0 | 0 | RARRES3   | exonic     | NM_00112.          | . | . | ENST0000 CpG: 83,C 11q12.3-q1 |
| ACaP0l | 11 | 72600000 | 72800000 | 0 | 0 | FCHSD2    | exonic     | NM_01482.          | . | . | ENST0000. 11q13.4             |
| ACaP0l | 11 | 77730000 | 77850000 | 0 | 0 | THRSP,NI  | exonic     | NM_00100.          | . | . | ENST0000 CpG: 64 11q14.1      |
| ACaP0l | 11 | 77850000 | 78170000 | 0 | 0 | GAB2,USF  | exonic     | NM_00100.          | . | . | ENST0000 CpG: 105,(11q14.1    |
| ACaP0l | 12 | 7550000  | 8090000  | 0 | 0 | NANOG,C   | exonic     | NM_00114.          | . | . | ENST0000 CpG: 52,C 12p13.31   |
| ACaP0l | 12 | 50560000 | 51100000 | 0 | 0 | FAM186A,  | exonic     | NM_00111.          | . | . | ENST0000 CpG: 31,C 12q13.12   |
| ACaP0l | 12 | 51100000 | 51250000 | 0 | 0 | DIP2B,ATF | exonic     | NM_00517.          | . | . | ENST0000 CpG: 27,C 12q13.12   |
| ACaP0l | 12 | 51250000 | 51390000 | 0 | 0 | HIGD1C,M  | exonic     | NM_00061.          | . | . | ENST0000. 12q13.12            |
| ACaP0l | 12 | 51390000 | 51420000 | 0 | 0 | SLC11A2   | exonic     | NM_00061.          | . | . | ENST0000 CpG: 73 12q13.12     |
| ACaP0l | 12 | 1.2E+08  | 1.2E+08  | 0 | 0 | CIT,LINC0 | exonic     | NM_00113.          | . | . | ENST0000 CpG: 31,C 12q24.23   |
| ACaP0l | 13 | 19770000 | 20630000 | 0 | 0 | LINC00421 | exonic     | NM_00103.          | . | . | ENST0000 CpG: 102,(13q12.11   |
| ACaP0l | 13 | 20630000 | 20640000 | 0 | 0 | ZMYM2     | exonic     | NM_00119.          | . | . | ENST0000. 13q12.11            |
| ACaP0l | 13 | 24320000 | 24470000 | 0 | 0 | C1QTNF9f  | exonic     | NM_00100.          | . | . | ENST0000 CpG: 53 13q12.12     |
| ACaP0l | 13 | 25000000 | 25030000 | 0 | 0 | PARP4     | exonic     | NM_00643.          | . | . | ENST0000. 13q12.12            |
| ACaP0l | 13 | 28550000 | 28640000 | 0 | 0 | FLT3,URA  | exonic     | NM_00110.          | . | . | ENST0000 CpG: 42,C 13q12.2    |
| ACaP0l | 13 | 28640000 | 28800000 | 0 | 0 | PAN3,FLT: | exonic     | NM_00411.          | . | . | ENST0000 CpG: 119,(13q12.2    |
| ACaP0l | 13 | 28800000 | 28860000 | 0 | 0 | PAN3      | exonic     | NM_17585.          | . | . | ENST0000. 13q12.2             |
| ACaP0l | 13 | 33740000 | 33770000 | 0 | 0 | STARD13   | exonic     | NM_00124.          | . | . | ENST0000. 13q13.1             |
| ACaP0l | 13 | 36130000 | 36340000 | 0 | 0 | NBEA,MIR  | exonic     | NM_00120.          | . | . | ENST0000. 13q13.3             |
| ACaP0l | 13 | 38350000 | 38360000 | 0 | 0 | TRPC4     | exonic     | NM_00113.          | . | . | ENST0000. 13q13.3             |
| ACaP0l | 13 | 50020000 | 50850000 | 0 | 0 | ARL11,MIF | exonic     | NM_00100.          | . | . | ENST0000 CpG: 101,(13q14.2    |
| ACaP0l | 13 | 53240000 | 53320000 | 0 | 0 | SUGT1,LE  | exonic     | NM_00101.          | . | . | ENST0000 CpG: 80 13q14.3      |
| ACaP0l | 13 | 53320000 | 60540000 | 0 | 0 | LINC0055f | exonic     | NM_00104.          | . | . | ENST0000 CpG: 88,C 13q14.3-q2 |
| ACaP0l | 13 | 73630000 | 73640000 | 0 | 0 | KLF5      | exonic     | NM_00128.          | . | . | ENST0000 CpG: 149 13q22.1     |

|        |    |          |          |   |   |                   |                    |                    |   |                               |
|--------|----|----------|----------|---|---|-------------------|--------------------|--------------------|---|-------------------------------|
| ACaP0l | 13 | 80910000 | 1.1E+08  | 0 | 0 | HS6ST3,S' exonic  | NM_00012.          | .                  | . | ENST0000 CpG: 391,(13q31.2-q3 |
| ACaP0l | 14 | 19110000 | 20350000 | 0 | 0 | LOC10050 exonic   | NM_00100.          | .                  | . | ENST0000 CpG: 49,C 14q11.2    |
| ACaP0l | 14 | 21770000 | 21850000 | 0 | 0 | RPGRIP1,1' exonic | NM_00719.          | .                  | . | ENST0000. 14q11.2             |
| ACaP0l | 14 | 31530000 | 92630000 | 0 | 0 | RP11-840l exonic  | NM_00002.          | .                  | . | ENST0000 CpG: 92,C 14q13.3-q3 |
| ACaP0l | 15 | 0        | 20160000 | 0 | 0 | .                 | intergenic         | NONE,NR_dist=NONE. | . | ENST0000 CpG: 55,C 15p13-p11  |
| ACaP0l | 15 | 20160000 | 23380000 | 0 | 0 | MIR4509-3 exonic  | NM_00100.          | .                  | . | ENST0000 CpG: 49,C 15q11.2-q1 |
| ACaP0l | 15 | 67670000 | 67770000 | 0 | 0 | IQCH,IQCt exonic  | NM_00103.          | .                  | . | ENST0000. 15q23               |
| ACaP0l | 16 | 14570000 | 15110000 | 0 | 0 | LOC10028 exonic   | NM_00113.          | .                  | . | ENST0000 CpG: 73,C 16p13.11-p |
| ACaP0l | 16 | 16330000 | 18600000 | 0 | 0 | MIR3180-3 exonic  | NM_00100.          | .                  | . | ENST0000 CpG: 140,(16p13.11-p |
| ACaP0l | 16 | 20540000 | 21060000 | 0 | 0 | ERI2,THUf exonic  | NM_00110.          | .                  | . | ENST0000 CpG: 87,C 16p12.3    |
| ACaP0l | 16 | 21060000 | 21080000 | 0 | 0 | DNAH3 exonic      | NM_01753.          | .                  | . | ENST0000. 16p12.3             |
| ACaP0l | 16 | 21080000 | 21970000 | 0 | 0 | NPIP3,LC exonic   | NM_00101.          | .                  | . | ENST0000 CpG: 102,(16p12.2-p1 |
| ACaP0l | 16 | 21970000 | 21980000 | 0 | 0 | UQCRC2 exonic     | NM_00336.          | .                  | . | ENST0000. 16p12.2             |
| ACaP0l | 16 | 22460000 | 22630000 | 0 | 0 | SMG1P1,L exonic   | NM_00113.          | .                  | . | ENST0000 CpG: 26,C 16p12.2    |
| ACaP0l | 16 | 29350000 | 29580000 | 0 | 0 | SLX1A-SU exonic   | NM_00101.          | .                  | . | ENST0000 CpG: 159,(16p11.2    |
| ACaP0l | 16 | 70850000 | 71170000 | 0 | 0 | HYDIN exonic      | NM_00119.          | .                  | . | ENST0000. 16q22.2             |
| ACaP0l | 16 | 71170000 | 71190000 | 0 | 0 | HYDIN exonic      | NM_00119.          | .                  | . | ENST0000. 16q22.2             |
| ACaP0l | 17 | 44120000 | 44380000 | 0 | 0 | LRRC37A, exonic   | NM_00110.          | .                  | . | ENST0000 CpG: 51,C 17q21.31   |
| ACaP0l | 17 | 44380000 | 44630000 | 0 | 0 | ARL17B,Lf exonic  | NM_00100.          | .                  | . | ENST0000 CpG: 68,C 17q21.31   |
| ACaP0l | 17 | 44630000 | 44850000 | 0 | 0 | LRRC37A, exonic   | NM_00100.          | .                  | . | ENST0000 CpG: 71,C 17q21.31   |
| ACaP0l | 17 | 48800000 | 58060000 | 0 | 0 | MRPS23,L exonic   | NM_00025.          | .                  | . | ENST0000 CpG: 46,C 17q22-q21  |
| ACaP0l | 18 | 0        | 40000    | 0 | 0 | .                 | intergenic         | NONE,NR_dist=NONE. | . | ENST0000 CpG: 67 18p11.32     |
| ACaP0l | 18 | 40000    | 130000   | 0 | 0 | MIR8078,FncRNA_ex | NR_03377.          | .                  | . | ENST0000 CpG: 21,C 18p11.32   |
| ACaP0l | 18 | 130000   | 190000   | 0 | 0 | USP14 exonic      | NM_00103.          | .                  | . | ENST0000 CpG: 70 18p11.32     |
| ACaP0l | 18 | 21520000 | 21540000 | 0 | 0 | LAMA3 exonic      | NM_00022.          | .                  | . | ENST0000. 18q11.2             |
| ACaP0l | 18 | 21540000 | 44540000 | 0 | 0 | DTNA,KCf exonic   | NM_00037.          | .                  | . | ENST0000 CpG: 37,C 18q12.1-q1 |
| ACaP0l | 18 | 50970000 | 51030000 | 0 | 0 | DCC exonic        | NM_00521.          | .                  | . | ENST0000. 18q21.2             |
| ACaP0l | 19 | 0        | 60000    | 0 | 0 | .                 | downstream         | NR_03326.          | . | . 19p13.3                     |
| ACaP0l | 19 | 60000    | 300000   | 0 | 0 | WASH5P,f exonic   | NM_00100.          | .                  | . | ENST0000 CpG: 117,(19p13.3    |
| ACaP0l | 19 | 8950000  | 9880000  | 0 | 0 | MBD3L1,C exonic   | NM_00100.          | .                  | . | ENST0000 CpG: 54,C 19p13.2    |
| ACaP0l | 19 | 14680000 | 15060000 | 0 | 0 | EMR2,NDf exonic   | NM_00100.          | .                  | . | ENST0000 CpG: 29,C 19p13.12   |
| ACaP0l | 19 | 42940000 | 43930000 | 0 | 0 | PSG6,CEf exonic   | NM_00102.          | .                  | . | ENST0000 CpG: 20,C 19q13.2-q1 |
| ACaP0l | 19 | 53720000 | 53740000 | 0 | 0 | ZNF677 UTR3       | NM_18260 NM_18260. | .                  | . | ENST0000. 19q13.42            |
| ACaP0l | 19 | 53740000 | 54300000 | 0 | 0 | MIR520H,I exonic  | NM_00100.          | .                  | . | ENST0000 CpG: 51,C 19q13.42   |
| ACaP0l | 20 | 0        | 120000   | 0 | 0 | DEFB125 exonic    | NM_15332.          | .                  | . | ENST0000. 20p13               |

|        |    |          |          |   |   |                    |                                  |   |   |                               |
|--------|----|----------|----------|---|---|--------------------|----------------------------------|---|---|-------------------------------|
| ACaP0i | 20 | 120000   | 3220000  | 0 | 0 | SIRPG,RS exonic    | NM_00049.                        | . | . | ENST0000 CpG: 102,(20p13      |
| ACaP0i | 20 | 3220000  | 3230000  | 0 | 0 | C20orf194 UTR3     | NM_00100NM_00100.                | . | . | ENST0000 CpG: 47,C 20p13      |
| ACaP0i | 20 | 3230000  | 3630000  | 0 | 0 | ATRN,C20 exonic    | NM_00100.                        | . | . | ENST0000 CpG: 93,C 20p13      |
| ACaP0i | 20 | 3630000  | 3640000  | 0 | 0 | GFRA4,AT UTR3      | NM_02213NM_02213.                | . | . | ENST0000. 20p13               |
| ACaP0i | 20 | 3640000  | 3870000  | 0 | 0 | CDC25B,C exonic    | NM_00103.                        | . | . | ENST0000 CpG: 73,C 20p13      |
| ACaP0i | 20 | 3870000  | 3880000  | 0 | 0 | PANK2 exonic       | NM_15363.                        | . | . | ENST0000 CpG: 128 20p13       |
| ACaP0i | 20 | 3880000  | 17620000 | 0 | 0 | SNAP25-A exonic    | NM_00021.                        | . | . | ENST0000 CpG: 71,C 20p13-p12  |
| ACaP0i | 20 | 17620000 | 17650000 | 0 | 0 | RRBP1 exonic       | NM_00104.                        | . | . | ENST0000. 20p12.1             |
| ACaP0i | 20 | 17650000 | 17700000 | 0 | 0 | BANF2,RR exonic    | NM_00115.                        | . | . | ENST0000 CpG: 177 20p12.1     |
| ACaP0i | 20 | 17700000 | 21150000 | 0 | 0 | SLC24A3,( exonic   | NM_00101.                        | . | . | ENST0000 CpG: 67,C 20p12.1-p1 |
| ACaP0i | 20 | 21150000 | 21180000 | 0 | 0 | PLK1S1,RlncRNA_ex  | NR_10995.                        | . | . | ENST0000. 20p11.23            |
| ACaP0i | 20 | 21180000 | 26050000 | 0 | 0 | FAM182A,, exonic   | NM_00009.                        | . | . | ENST0000 CpG: 111,(20p11.1-p1 |
| ACaP0i | 20 | 26050000 | 31300000 | 0 | 0 | DEFB116,l exonic   | NM_00100.                        | . | . | ENST0000 CpG: 24,C 20q11.21-p |
| ACaP0i | 20 | 31300000 | 31310000 | 0 | 0 | COMMD7 intronic    | NM_00109.                        | . | . | ENST0000. 20q11.21            |
| ACaP0i | 20 | 31310000 | 31320000 | 0 | 0 | COMMD7 exonic      | NM_00109.                        | . | . | ENST0000. 20q11.21            |
| ACaP0i | 20 | 31320000 | 31330000 | 0 | 0 | COMMD7 intronic    | NM_00109.                        | . | . | ENST0000. 20q11.21            |
| ACaP0i | 20 | 31330000 | 34460000 | 0 | 0 | MMP24-A5 exonic    | NM_00017.                        | . | . | ENST0000 CpG: 149,(20q11.23-c |
| ACaP0i | 20 | 34460000 | 34480000 | 0 | 0 | PHF20 intronic     | NM_01643.                        | . | . | ENST0000. 20q11.23            |
| ACaP0i | 20 | 34480000 | 34490000 | 0 | 0 | PHF20 exonic       | NM_01643.                        | . | . | ENST0000. 20q11.23            |
| ACaP0i | 20 | 34490000 | 34500000 | 0 | 0 | PHF20 intronic     | NM_01643.                        | . | . | ENST0000. 20q11.23            |
| ACaP0i | 20 | 34500000 | 35540000 | 0 | 0 | SCAND1,T exonic    | NM_00104.                        | . | . | ENST0000 CpG: 209,(20q11.23   |
| ACaP0i | 20 | 35540000 | 35850000 | 0 | 0 | RBL1,SAM exonic    | NM_00113.                        | . | . | ENST0000 CpG: 70,C 20q11.23   |
| ACaP0i | 20 | 35850000 | 50420000 | 0 | 0 | WFDC11,( exonic    | NM_00002.                        | . | . | ENST0000 CpG: 100,(20q13.13-c |
| ACaP0i | 20 | 50420000 | 50660000 | 0 | 0 | RP5-1112f ncRNA_ex | NR_11001.                        | . | . | ENST0000. 20q13.2             |
| ACaP0i | 20 | 50660000 | 50670000 | 0 | 0 | .                  | intergenic NR_11001 dist=18054.  | . | . | ENST0000. 20q13.2             |
| ACaP0i | 20 | 50670000 | 50700000 | 0 | 0 | .                  | downstream NM_19942.             | . | . | ENST0000. 20q13.2             |
| ACaP0i | 20 | 50700000 | 55030000 | 0 | 0 | MC3R,FAM exonic    | NM_00078.                        | . | . | ENST0000 CpG: 27,C 20q13.31-c |
| ACaP0i | 20 | 55030000 | 55040000 | 0 | 0 | CASS4 exonic       | NM_00116.                        | . | . | ENST0000. 20q13.31            |
| ACaP0i | 20 | 55040000 | 55120000 | 0 | 0 | GCNT7,RT exonic    | NM_00101.                        | . | . | ENST0000 CpG: 37 20q13.31     |
| ACaP0i | 20 | 55120000 | 55200000 | 0 | 0 | .                  | intergenic NM_00101 dist=8426;1. | . | . | ENST0000. 20q13.31            |
| ACaP0i | 20 | 55200000 | 55220000 | 0 | 0 | TFAP2C exonic      | NM_00322.                        | . | . | ENST0000 CpG: 475 20q13.31    |
| ACaP0i | 20 | 55220000 | 55740000 | 0 | 0 | .                  | intergenic NM_00322 dist=5662;1. | . | . | ENST0000 CpG: 59,C 20q13.31   |
| ACaP0i | 20 | 55740000 | 60080000 | 0 | 0 | CTCFL,LO exonic    | NM_00011.                        | . | . | ENST0000 CpG: 86,C 20q13.32-c |
| ACaP0i | 20 | 62920000 | 62960000 | 0 | 0 | LINC00266 ncRNA_ex | NR_04041.                        | . | . | ENST0000 CpG: 78,C 20q13.33   |
| ACaP0i | 20 | 62960000 | 63025520 | 0 | 0 | .                  | intergenic NR_04041 dist=25293.  | . | . | 20q13.33                      |

|         |          |          |          |   |   |           |            |                       |   |                               |
|---------|----------|----------|----------|---|---|-----------|------------|-----------------------|---|-------------------------------|
| ACaP0i  | 21       | 0        | 9750000  | 0 | 0 | .         | intergenic | NONE,NR_dist=NONE.    | . | ENST0000 CpG: 165,(21p12-p11  |
| ACaP0i  | 21       | 9750000  | 11100000 | 0 | 0 | TPTE,MIR: | exonic     | NM_00118.             | . | ENST0000 CpG: 46,C 21p11.2-p1 |
| ACaP0i  | 21       | 11100000 | 14410000 | 0 | 0 | .         | upstream   | NR_02691.             | . | ENST0000 CpG: 38,C 21q11.2-p1 |
| ACaP0i  | 21       | 41420000 | 41430000 | 0 | 0 | DSCAM     | exonic     | NM_00127.             | . | ENST0000. 21q22.2             |
| ACaP0i  | 22       | 0        | 16090000 | 0 | 0 | .         | intergenic | NONE,NR_dist=NONE.    | . | ENST0000. 22p11.2-p1          |
| ACaP0i  | 22       | 16090000 | 16970000 | 0 | 0 | POTEH,BI  | exonic     | NM_00100.             | . | ENST0000 CpG: 37,C 22q11.1    |
| ACaP0i  | 22       | 51180000 | 51240000 | 0 | 0 | RPL23AP8  | exonic     | NM_00100.             | . | ENST0000 CpG: 63 22q13.33     |
| ACaP0i  | 22       | 51240000 | 51304566 | 0 | 0 | .         | intergenic | NR_02698 dist=1935;(. | . | 22q13.33                      |
| ACaP0iX | 48040000 | 48250000 |          | 0 | 0 | SSX3,SSX  | exonic     | NM_00103.             | . | ENST0000. Xp11.23             |
| ACaP0iX | 49150000 | 49170000 |          | 0 | 0 | GAGE10    | exonic     | NM_00109.             | . | ENST0000. Xp11.23             |
| ACaP0iX | 49170000 | 49360000 |          | 0 | 0 | GAGE12C   | exonic     | NM_00109.             | . | ENST0000 CpG: 43,C Xp11.23    |
| ACaP0iX | 53640000 | 54080000 |          | 0 | 0 | PHF8,HUV  | exonic     | NM_00118.             | . | ENST0000 CpG: 90,C Xp11.22    |
| ACaP0iX | 54080000 | 70810000 |          | 0 | 0 | OGT,PAGI  | exonic     | NM_00003.             | . | ENST0000 CpG: 23,C Xp11.21-X  |
| ACaP0iX | 1.18E+08 | 1.35E+08 |          | 0 | 0 | SMIM10,M  | exonic     | NM_00019.             | . | ENST0000 CpG: 32,C Xq25-Xq26  |
| ACaP0iX | 1.35E+08 | 1.35E+08 |          | 0 | 0 | CT45A6,C  | exonic     | NM_00100.             | . | ENST0000 CpG: 31,C Xq26.3     |
| ACaP0iX | 1.54E+08 | 1.55E+08 |          | 0 | 0 | H2AFB2,S  | exonic     | NM_00013.             | . | ENST0000 CpG: 29,C Xq28       |
| ACaP0iX | 1.55E+08 | 1.55E+08 |          | 0 | 0 | .         | intergenic | NM_00218 dist=19518.  | . | Xq28                          |
| ACaP0i  | 1        | 9990000  | 10080000 | 0 | 0 | RBP7,NM1  | exonic     | NM_02278.             | . | ENST0000 CpG: 39,C 1p36.22    |
| ACaP0i  | 1        | 23900000 | 23920000 | 0 | 0 | .         | intergenic | NM_00216 dist=13715.  | . | ENST0000. 1p36.11-p1          |
| ACaP0i  | 1        | 1.09E+08 | 1.09E+08 | 0 | 0 | NBPF4,NB  | exonic     | NM_00114.             | . | ENST0000 CpG: 51 1p13.3       |
| ACaP0i  | 1        | 2E+08    | 2E+08    | 0 | 0 | NR5A2     | exonic     | NM_00127.             | . | ENST0000. 1q32.1              |
| ACaP0i  | 1        | 2.24E+08 | 2.24E+08 | 0 | 0 | FBXO28,N  | exonic     | NM_00113.             | . | ENST0000 CpG: 121 1q42.11     |
| ACaP0i  | 3        | 10070000 | 10280000 | 0 | 0 | FANCD2,v  | exonic     | NM_00055.             | . | ENST0000 CpG: 43,C 3p25.3     |
| ACaP0i  | 5        | 1.56E+08 | 1.56E+08 | 0 | 0 | HAVCR1    | exonic     | NM_00109.             | . | ENST0000. 5q33.3              |
| ACaP0i  | 5        | 1.56E+08 | 1.57E+08 | 0 | 0 | HAVCR1,f  | exonic     | NM_00109.             | . | ENST0000. 5q33.3              |
| ACaP0i  | 8        | 1.29E+08 | 1.29E+08 | 0 | 0 | MIR1204   | ncRNA_ex   | NR_03160.             | . | ENST0000 CpG: 79 8q24.21      |
| ACaP0i  | 11       | 18250000 | 18500000 | 0 | 0 | SAA1,SAA  | exonic     | NM_00033.             | . | ENST0000 CpG: 60,C 11p15.1    |
| ACaP0i  | 11       | 73510000 | 73720000 | 0 | 0 | MRPL48,C  | exonic     | NM_00126.             | . | ENST0000 CpG: 95,C 11q13.4    |
| ACaP0i  | 12       | 7850000  | 7860000  | 0 | 0 | .         | intergenic | NM_02063 dist=1640;(. | . | CpG: 24 12p13.31              |
| ACaP0i  | 12       | 7860000  | 8220000  | 0 | 0 | SLC2A14,f | exonic     | NM_00114.             | . | ENST0000 CpG: 52,C 12p13.31   |
| ACaP0i  | 15       | 41630000 | 41670000 | 0 | 0 | NUSAP1    | exonic     | NM_00124.             | . | ENST0000. 15q15.1             |
| ACaP0i  | 21       | 10790000 | 10800000 | 0 | 0 | .         | intergenic | NR_03832 dist=82140.  | . | 21p11.2                       |
| ACaP0iX | 1.19E+08 | 1.19E+08 |          | 0 | 0 | MIR766,SE | exonic     | NM_01512.             | . | ENST0000 CpG: 18,C Xq24       |
| ACaP0i  | 1        | 1.52E+08 | 1.52E+08 | 0 | 0 | FLG       | exonic     | NM_00201.             | . | ENST0000. 1q21.3              |
| ACaP0i  | 4        | 9220000  | 9250000  | 0 | 0 | USP17L21  | exonic     | NM_00125.             | . | ENST0000. 4p16.1              |

|        |    |          |          |   |   |            |            |                       |   |   |                     |            |
|--------|----|----------|----------|---|---|------------|------------|-----------------------|---|---|---------------------|------------|
| ACaP0! | 4  | 9250000  | 9270000  | 0 | 0 | USP17L19   | exonic     | NM_00125.             | . | . | ENST0000.           | 4p16.1     |
| ACaP0! | 4  | 9270000  | 9350000  | 0 | 0 | USP17L20   | exonic     | NM_00124.             | . | . | ENST0000.           | 4p16.1     |
| ACaP0! | 4  | 9350000  | 9360000  | 0 | 0 | USP17L5,l  | exonic     | NM_00124.             | . | . | ENST0000.           | 4p16.1     |
| ACaP0! | 4  | 1.91E+08 | 1.91E+08 | 0 | 0 | DUX4L2,D   | exonic     | NM_00112.             | . | . | ENST0000 CpG: 2005  | 4q35.2     |
| ACaP0! | 4  | 1.91E+08 | 1.91E+08 | 0 | 0 | .          | intergenic | NM_03317 dist=6558;1. | . | . | .                   | 4q35.2     |
| ACaP0! | 5  | 80930000 | 80950000 | 0 | 0 | SSBP2      | exonic     | NM_00125.             | . | . | ENST0000.           | 5q14.1     |
| ACaP0! | 5  | 1.79E+08 | 1.79E+08 | 0 | 0 | ADAMTS2    | exonic     | NM_01424.             | . | . | ENST0000 CpG: 19,C  | 5q35.3     |
| ACaP0! | 7  | 1.01E+08 | 1.01E+08 | 0 | 0 | MUC12      | exonic     | NM_00116.             | . | . | ENST0000.           | 7q22.1     |
| ACaP0! | 7  | 1.01E+08 | 1.01E+08 | 0 | 0 | MUC17      | exonic     | NM_00104.             | . | . | ENST0000.           | 7q22.1     |
| ACaP0! | 12 | 18520000 | 18660000 | 0 | 0 | PIK3C2G    | exonic     | NM_00128.             | . | . | ENST0000.           | 12p12.3    |
| ACaP0! | 14 | 1.05E+08 | 1.05E+08 | 0 | 0 | AHNAK2     | exonic     | NM_13842.             | . | . | ENST0000.           | 14q32.33   |
| ACaP0! | 15 | 1.02E+08 | 1.02E+08 | 0 | 0 | .          | intergenic | NM_15233 dist=15355.  | . | . | ENST0000 CpG: 87    | 15q26.3    |
| ACaP0! | 20 | 0        | 70000    | 0 | 0 | DEFB125    | exonic     | NM_15332.             | . | . | ENST0000.           | 20p13      |
| ACaP0! | 22 | 43550000 | 43690000 | 0 | 0 | TTLL12,T   | exonic     | NM_00071.             | . | . | ENST0000 CpG: 44,C  | 22q13.2    |
| ACaP0! | 22 | 47360000 | 50180000 | 0 | 0 | LOC90834   | exonic     | NM_00103.             | . | . | ENST0000 CpG: 64,C  | 22q13.32-c |
| ACaP0! | 1  | 1.52E+08 | 1.52E+08 | 0 | 0 | FLG        | exonic     | NM_00201.             | . | . | ENST0000.           | 1q21.3     |
| ACaP0! | 1  | 2.24E+08 | 2.24E+08 | 0 | 0 | CAPN8      | intronic   | NM_00114.             | . | . | ENST0000 CpG: 213   | 1q41       |
| ACaP0! | 2  | 45160000 | 45240000 | 0 | 0 | SIX3-AS1,l | exonic     | NM_00541.             | . | . | ENST0000 CpG: 115,( | 2p21       |
| ACaP0! | 2  | 1.2E+08  | 1.2E+08  | 0 | 0 | EN1        | exonic     | NM_00142.             | . | . | ENST0000 CpG: 41,C  | 2q14.2     |
| ACaP0! | 2  | 1.91E+08 | 1.91E+08 | 0 | 0 | TMEM194l   | exonic     | NM_00114.             | . | . | ENST0000 CpG: 73    | 2q32.2     |
| ACaP0! | 2  | 2.25E+08 | 2.25E+08 | 0 | 0 | CUL3       | exonic     | NM_00125.             | . | . | ENST0000 CpG: 106   | 2q36.2     |
| ACaP0! | 3  | 71800000 | 71840000 | 0 | 0 | EIF4E3,G   | exonic     | NM_00112.             | . | . | ENST0000 CpG: 193,( | 3p13       |
| ACaP0! | 4  | 42640000 | 42660000 | 0 | 0 | ATP8A1     | exonic     | NM_00110.             | . | . | ENST0000 CpG: 110   | 4p13       |
| ACaP0! | 4  | 1.91E+08 | 1.91E+08 | 0 | 0 | DUX4L4,D   | exonic     | NM_00112.             | . | . | ENST0000 CpG: 2005  | 4q35.2     |
| ACaP0! | 4  | 1.91E+08 | 1.91E+08 | 0 | 0 | .          | intergenic | NM_03317 dist=6558;1. | . | . | .                   | 4q35.2     |
| ACaP0! | 5  | 1.11E+08 | 1.11E+08 | 0 | 0 | CAMK4      | exonic     | NM_00174.             | . | . | ENST0000 CpG: 95    | 5q22.1     |
| ACaP0! | 6  | 0        | 110000   | 0 | 0 | .          | intergenic | NONE,NR_dist=NONE.    | . | . | .                   | 6p25.3     |
| ACaP0! | 7  | 1.01E+08 | 1.01E+08 | 0 | 0 | MUC12      | exonic     | NM_00116.             | . | . | ENST0000.           | 7q22.1     |
| ACaP0! | 8  | 6830000  | 8660000  | 0 | 0 | DEFA1B,D   | exonic     | NM_00103.             | . | . | ENST0000 CpG: 60,C  | 8p23.1     |
| ACaP0! | 8  | 86550000 | 86840000 | 0 | 0 | REXO1L2f   | ncRNA_ex   | NR_00359.             | . | . | ENST0000 CpG: 130,( | 8q21.2     |
| ACaP0! | 8  | 1.05E+08 | 1.05E+08 | 0 | 0 | RIMS2      | exonic     | NM_00110.             | . | . | ENST0000 CpG: 242   | 8q22.3     |
| ACaP0! | 10 | 11040000 | 11060000 | 0 | 0 | CELF2      | exonic     | NM_00102.             | . | . | ENST0000 CpG: 131   | 10p14      |
| ACaP0! | 10 | 1.35E+08 | 1.36E+08 | 0 | 0 | DUX4L3,D   | exonic     | NM_00108.             | . | . | ENST0000 CpG: 1534  | 10q26.3    |
| ACaP0! | 11 | 1.07E+08 | 1.07E+08 | 0 | 0 | GUCY1A2    | exonic     | NM_00085.             | . | . | ENST0000 CpG: 134   | 11q22.3    |
| ACaP0! | 14 | 1.05E+08 | 1.05E+08 | 0 | 0 | AHNAK2     | exonic     | NM_13842.             | . | . | ENST0000 CpG: 178   | 14q32.33   |

|         |    |          |          |   |   |             |            |           |             |   |           |             |            |
|---------|----|----------|----------|---|---|-------------|------------|-----------|-------------|---|-----------|-------------|------------|
| ACaP0!  | 15 | 73650000 | 73740000 | 0 | 0 | C15orf60, f | exonic     | NM_00104. | .           | . | ENST0000  | CpG: 21, C  | 15q24.1    |
| ACaP0!  | 15 | 1.02E+08 | 1.02E+08 | 0 | 0 | .           | intergenic | NM_15233  | dist=15355. | . | ENST0000  | CpG: 87     | 15q26.3    |
| ACaP0!  | 16 | 51180000 | 51190000 | 0 | 0 | SALL1       | exonic     | NM_00296. | .           | . | ENST0000  | CpG: 47, C  | 16q12.1    |
| ACaP0!  | 16 | 75010000 | 75610000 | 0 | 0 | ZNRF1, TM   | exonic     | NM_00102. | .           | . | ENST0000  | CpG: 98, C  | 16q23.1    |
| ACaP0!  | 17 | 19870000 | 21550000 | 0 | 0 | CCDC144!    | exonic     | NM_00100. | .           | . | ENST0000  | CpG: 47, C  | 17p11.2    |
| ACaP0!  | 18 | 40000    | 120000   | 0 | 0 | MIR8078, F  | ncRNA_ex   | NR_03377. | .           | . | ENST0000  | CpG: 59, C  | 18p11.32   |
| ACaP0!  | 18 | 7560000  | 7570000  | 0 | 0 | PTPRM       | exonic     | NM_00110. | .           | . | ENST0000  | CpG: 232    | 18p11.23   |
| ACaP0!  | 18 | 29070000 | 29080000 | 0 | 0 | DSG2        | exonic     | NM_00194. | .           | . | ENST0000  | CpG: 80     | 18q12.1    |
| ACaP0!  | 18 | 34390000 | 34420000 | 0 | 0 | KIAA1328,   | exonic     | NM_00127. | .           | . | ENST0000  | CpG: 81     | 18q12.2    |
| ACaP0!  | 18 | 77150000 | 77670000 | 0 | 0 | PQLC1, KC   | exonic     | NM_00114. | .           | . | ENST0000  | CpG: 73, C  | 18q23      |
| ACaP0!  | 18 | 77670000 | 78010000 | 0 | 0 | ADNP2, PC   | exonic     | NM_00113. | .           | . | ENST0000  | CpG: 105, ( | 18q23      |
| ACaP0!  | 19 | 22830000 | 22950000 | 0 | 0 | ZNF492, Z!  | exonic     | NM_00108. | .           | . | ENST0000  | CpG: 22     | 19p12      |
| ACaP0!  | 19 | 22950000 | 23410000 | 0 | 0 | ZNF730, Z!  | exonic     | NM_00108. | .           | . | ENST0000  | CpG: 40, C  | 19p12      |
| ACaP0!  | 20 | 3950000  | 3960000  | 0 | 0 | RNF24       | exonic     | NM_00113. | .           | . | ENST0000. |             | 20p13      |
| ACaP0!  | 20 | 26180000 | 26190000 | 0 | 0 | MIR663A, L  | ncRNA_ex   | NR_03038. | .           | . | ENST0000  | CpG: 201    | 20p11.1    |
| ACaP0!  | 20 | 61800000 | 61810000 | 0 | 0 | MIR124-3    | ncRNA_ex   | NR_02967. | .           | . | ENST0000  | CpG: 424    | 20q13.33   |
| ACaP0!  | 21 | 42530000 | 42540000 | 0 | 0 | BACE2, MII  | ncRNA_ex   | NR_03616. | .           | . | ENST0000  | CpG: 149    | 21q22.2    |
| ACaP0!  | 22 | 18650000 | 18930000 | 0 | 0 | USP18, GG   | exonic     | NM_00119. | .           | . | ENST0000  | CpG: 97, C  | 22q11.21   |
| ACaP0!  | 22 | 20320000 | 20730000 | 0 | 0 | PI4KAP1, F  | exonic     | NM_00124. | .           | . | ENST0000  | CpG: 131, ( | 22q11.21   |
| ACaP0!  | 22 | 20730000 | 20740000 | 0 | 0 | .           | intergenic | NM_01567  | dist=26821. | . | ENST0000. |             | 22q11.21   |
| ACaP0!  | 22 | 21470000 | 21750000 | 0 | 0 | BCRP2, FA   | exonic     | NM_00112. | .           | . | ENST0000  | CpG: 29, C  | 22q11.21   |
| ACaP0!X |    | 1.2E+08  | 1.2E+08  | 0 | 0 | CT47A11, (  | exonic     | NM_00108. | .           | . | ENST0000  | CpG: 75, C  | Xq24       |
| ACaP1!  | 1  | 12830000 | 12860000 | 0 | 0 | PRAMEF1     | exonic     | NM_00108. | .           | . | ENST0000. |             | 1p36.21    |
| ACaP1!  | 1  | 12860000 | 12880000 | 0 | 0 | .           | intergenic | NM_02301  | dist=3223;! | . | .         |             | 1p36.21    |
| ACaP1!  | 1  | 12880000 | 13370000 | 0 | 0 | PRAMEF1!    | exonic     | NM_00100. | .           | . | ENST0000. |             | 1p36.21    |
| ACaP1!  | 1  | 13370000 | 13680000 | 0 | 0 | PRAMEF8     | exonic     | NM_00101. | .           | . | ENST0000. |             | 1p36.21    |
| ACaP1!  | 1  | 45960000 | 53510000 | 0 | 0 | CYP4A11, ,  | exonic     | NM_00077. | .           | . | ENST0000  | CpG: 39, C  | 1p34.1-p33 |
| ACaP1!  | 1  | 1.44E+08 | 1.45E+08 | 0 | 0 | PPIAL4A, F  | exonic     | NM_00103. | .           | . | ENST0000  | CpG: 86, C  | 1q21.1     |
| ACaP1!  | 1  | 1.45E+08 | 1.45E+08 | 0 | 0 | NBPF25P, ,  | exonic     | NM_00103. | .           | . | ENST0000. |             | 1q21.1     |
| ACaP1!  | 1  | 1.46E+08 | 1.46E+08 | 0 | 0 | NBPF12, G   | exonic     | NM_00103. | .           | . | ENST0000  | CpG: 16, C  | 1q21.1     |
| ACaP1!  | 1  | 1.48E+08 | 1.49E+08 | 0 | 0 | NBPF9, PP   | exonic     | NM_00103. | .           | . | ENST0000  | CpG: 26, C  | 1q21.2     |
| ACaP1!  | 1  | 1.49E+08 | 1.5E+08  | 0 | 0 | .           | intergenic | NR_02748  | dist=81697. | . | ENST0000  | CpG: 25, C  | 1q21.2     |
| ACaP1!  | 1  | 1.5E+08  | 1.5E+08  | 0 | 0 | PPIAL4B, F  | exonic     | NM_00113. | .           | . | ENST0000. |             | 1q21.2     |
| ACaP1!  | 1  | 1.5E+08  | 1.52E+08 | 0 | 0 | CTSK, SEL   | exonic     | NM_00039. | .           | . | ENST0000  | CpG: 103, ( | 1q21.3-q21 |
| ACaP1!  | 1  | 2.48E+08 | 2.49E+08 | 0 | 0 | OR2T3, OF   | exonic     | NM_00100. | .           | . | ENST0000. |             | 1q44       |

|        |    |          |          |   |   |            |            |                      |   |   |                               |            |
|--------|----|----------|----------|---|---|------------|------------|----------------------|---|---|-------------------------------|------------|
| ACaP10 | 1  | 2.49E+08 | 2.49E+08 | 0 | 0 | SH3BP5L, l | exonic     | NM_00100.            | . | . | ENST0000 CpG: 86,C            | 1q44       |
| ACaP10 | 1  | 2.49E+08 | 2.49E+08 | 0 | 0 | PGBD2      | exonic     | NM_00101.            | . | . | ENST0000.                     | 1q44       |
| ACaP10 | 2  | 1.38E+08 | 1.38E+08 | 0 | 0 | THSD7B     | exonic     | NM_00108.            | . | . | ENST0000.                     | 2q22.1     |
| ACaP10 | 2  | 1.99E+08 | 1.99E+08 | 0 | 0 | PLCL1      | exonic     | NM_00622.            | . | . | ENST0000.                     | 2q33.1     |
| ACaP10 | 2  | 2.07E+08 | 2.07E+08 | 0 | 0 | .          | intergenic | NM_02092 dist=10085. | . | . | .                             | 2q33.3     |
| ACaP10 | 3  | 89480000 | 1.82E+08 | 0 | 0 | ABI3BP, Rf | exonic     | NM_00005.            | . | . | ENST0000 CpG: 105,(3q26.31-q2 |            |
| ACaP10 | 3  | 1.82E+08 | 1.82E+08 | 0 | 0 | FLJ46066   | ncRNA_ex   | NR_04010.            | . | . | ENST0000.                     | 3q26.33    |
| ACaP10 | 3  | 1.82E+08 | 1.83E+08 | 0 | 0 | FLJ46066   | ncRNA_ex   | NR_04010.            | . | . | ENST0000 CpG: 62              | 3q26.33    |
| ACaP10 | 3  | 1.83E+08 | 1.98E+08 | 0 | 0 | DGKG, SNt  | exonic     | NM_00041.            | . | . | ENST0000 CpG: 108,(3q29-q26.3 |            |
| ACaP10 | 3  | 1.98E+08 | 1.98E+08 | 0 | 0 | .          | intergenic | NM_00114 dist=52272. | . | . | .                             | 3q29       |
| ACaP10 | 4  | 71220000 | 71240000 | 0 | 0 | SMR3A      | exonic     | NM_01239.            | . | . | ENST0000.                     | 4q13.3     |
| ACaP10 | 4  | 86490000 | 86500000 | 0 | 0 | ARHGAP2    | exonic     | NM_00102.            | . | . | ENST0000.                     | 4q21.23    |
| ACaP10 | 5  | 90440000 | 90460000 | 0 | 0 | GPR98      | exonic     | NM_03211.            | . | . | ENST0000.                     | 5q14.3     |
| ACaP10 | 6  | 28960000 | 29150000 | 0 | 0 | LOC10012   | exonic     | NM_00100.            | . | . | ENST0000 CpG: 23,C            | 6p22.1     |
| ACaP10 | 6  | 34570000 | 34630000 | 0 | 0 | C6orf106   | exonic     | NM_02275.            | . | . | ENST0000.                     | 6p21.31    |
| ACaP10 | 6  | 51770000 | 51880000 | 0 | 0 | PKHD1      | exonic     | NM_13869.            | . | . | ENST0000.                     | 6p12.2-p12 |
| ACaP10 | 6  | 73040000 | 73120000 | 0 | 0 | RIMS1      | exonic     | NM_00116.            | . | . | ENST0000.                     | 6q13       |
| ACaP10 | 6  | 1.17E+08 | 1.17E+08 | 0 | 0 | FAM26E, T  | exonic     | NM_00113.            | . | . | ENST0000.                     | 6q22.1     |
| ACaP10 | 6  | 1.61E+08 | 1.61E+08 | 0 | 0 | SLC22A3, l | exonic     | NM_00030.            | . | . | ENST0000 CpG: 36              | 6q25.3-q26 |
| ACaP10 | 7  | 36710000 | 37060000 | 0 | 0 | ELMO1-A5   | exonic     | NM_00103.            | . | . | ENST0000.                     | 7p14.2     |
| ACaP10 | 7  | 64990000 | 69600000 | 0 | 0 | KCTD7, TY  | exonic     | NM_00004.            | . | . | ENST0000 CpG: 50,C            | 7q11.21-q1 |
| ACaP10 | 7  | 74180000 | 75150000 | 0 | 0 | NCF1C, TR  | exonic     | NM_00026.            | . | . | ENST0000 CpG: 60,C            | 7q11.23    |
| ACaP10 | 8  | 1.04E+08 | 1.04E+08 | 0 | 0 | ODF1       | exonic     | NM_02441.            | . | . | ENST0000.                     | 8q22.3     |
| ACaP10 | 8  | 1.22E+08 | 1.22E+08 | 0 | 0 | SNTB1      | exonic     | NM_02102.            | . | . | ENST0000.                     | 8q24.12    |
| ACaP10 | 10 | 68930000 | 71060000 | 0 | 0 | SLC25A16   | exonic     | NM_00103.            | . | . | ENST0000 CpG: 74,C            | 10q22.1-q2 |
| ACaP10 | 10 | 96470000 | 96750000 | 0 | 0 | CYP2C9, C  | exonic     | NM_00076.            | . | . | ENST0000.                     | 10q23.33   |
| ACaP10 | 11 | 6120000  | 6200000  | 0 | 0 | OR56B4, O  | exonic     | NM_00100.            | . | . | ENST0000.                     | 11p15.4    |
| ACaP10 | 11 | 1.24E+08 | 1.25E+08 | 0 | 0 | OR8B12, O  | exonic     | NM_00100.            | . | . | ENST0000 CpG: 44              | 11q24.2    |
| ACaP10 | 12 | 32520000 | 32540000 | 0 | 0 | BICD1      | exonic     | NM_00100.            | . | . | ENST0000.                     | 12p11.21   |
| ACaP10 | 13 | 73420000 | 74390000 | 0 | 0 | KLF12, PIB | exonic     | NM_00128.            | . | . | ENST0000 CpG: 149             | 13q22.1    |
| ACaP10 | 13 | 74390000 | 74410000 | 0 | 0 | KLF12      | intronic   | NM_00724.            | . | . | ENST0000.                     | 13q22.1    |
| ACaP10 | 13 | 74410000 | 74420000 | 0 | 0 | KLF12      | exonic     | NM_00724.            | . | . | ENST0000.                     | 13q22.1    |
| ACaP10 | 14 | 59730000 | 59740000 | 0 | 0 | DAAM1      | exonic     | NM_00127.            | . | . | ENST0000.                     | 14q23.1    |
| ACaP10 | 14 | 61790000 | 62130000 | 0 | 0 | RP11-47I2  | exonic     | NM_00625.            | . | . | ENST0000.                     | 14q23.1-q2 |
| ACaP10 | 15 | 43850000 | 44020000 | 0 | 0 | CATSPER    | exonic     | NM_00101.            | . | . | ENST0000 CpG: 45,C            | 15q15.3    |

|         |    |          |          |   |   |           |            |                       |   |   |                     |            |
|---------|----|----------|----------|---|---|-----------|------------|-----------------------|---|---|---------------------|------------|
| ACaP10  | 16 | 10850000 | 10870000 | 0 | 0 | TVP23A,N  | exonic     | NM_00107.             | . | . | ENST0000.           | 16p13.13   |
| ACaP10  | 16 | 21000000 | 21220000 | 0 | 0 | TMEM159,  | exonic     | NM_00346.             | . | . | ENST0000 CpG: 50    | 16p12.3-p1 |
| ACaP10  | 16 | 33360000 | 33510000 | 0 | 0 | RNU6-76P  | ncRNA_ex   | NR_04694.             | . | . | ENST0000 CpG: 27    | 16p11.2    |
| ACaP10  | 16 | 56780000 | 56840000 | 0 | 0 | NUP93     | exonic     | NM_00124.             | . | . | ENST0000.           | 16q13      |
| ACaP10  | 16 | 68070000 | 68250000 | 0 | 0 | NFATC3,D  | exonic     | NM_00127.             | . | . | ENST0000 CpG: 104   | 16q22.1    |
| ACaP10  | 16 | 70880000 | 71170000 | 0 | 0 | HYDIN     | exonic     | NM_00119.             | . | . | ENST0000.           | 16q22.2    |
| ACaP10  | 16 | 71170000 | 71180000 | 0 | 0 | HYDIN     | exonic     | NM_00119.             | . | . | ENST0000.           | 16q22.2    |
| ACaP10  | 16 | 73170000 | 74460000 | 0 | 0 | AC009120  | exonic     | NM_00101.             | . | . | ENST0000 CpG: 65,C  | 16q23.1-q2 |
| ACaP10  | 18 | 42440000 | 42460000 | 0 | 0 | SETBP1    | exonic     | NM_00113.             | . | . | ENST0000.           | 18q12.3    |
| ACaP10  | 20 | 1350000  | 1360000  | 0 | 0 | FKBP1A-S  | exonic     | NM_00080.             | . | . | ENST0000.           | 20p13      |
| ACaP10  | 20 | 23530000 | 23540000 | 0 | 0 | .         | intergenic | NR_00127 dist=7345;1. | . | . | .                   | 20p11.21   |
| ACaP10  | 20 | 35290000 | 35330000 | 0 | 0 | NDRG3     | exonic     | NM_02247.             | . | . | ENST0000.           | 20q11.23   |
| ACaP10  | 20 | 35330000 | 35340000 | 0 | 0 | NDRG3     | exonic     | NM_03201.             | . | . | ENST0000.           | 20q11.23   |
| ACaP10  | 20 | 36360000 | 36390000 | 0 | 0 | CTNNBL1   | exonic     | NM_00128.             | . | . | ENST0000.           | 20q11.23   |
| ACaP10  | 21 | 27310000 | 27390000 | 0 | 0 | APP       | exonic     | NM_00048.             | . | . | ENST0000.           | 21q21.3    |
| ACaP10  | 21 | 27390000 | 27860000 | 0 | 0 | CYYR1,AP  | exonic     | NM_00048.             | . | . | ENST0000 CpG: 168   | 21q21.3    |
| ACaP10  | 21 | 34650000 | 34780000 | 0 | 0 | IFNGR2,IF | exonic     | NM_00062.             | . | . | ENST0000 CpG: 110,( | 21q22.11   |
| ACaP10  | 21 | 37710000 | 37740000 | 0 | 0 | MORC3     | exonic     | NM_01535.             | . | . | ENST0000.           | 21q22.12   |
| ACaP10  | 21 | 37740000 | 37750000 | 0 | 0 | MORC3     | exonic     | NM_01535.             | . | . | ENST0000.           | 21q22.12   |
| ACaP10  | 21 | 37750000 | 37790000 | 0 | 0 | CHAF1B    | exonic     | NM_00544.             | . | . | ENST0000 CpG: 68    | 21q22.12   |
| ACaP10  | 21 | 39420000 | 39430000 | 0 | 0 | DSCR4     | exonic     | NM_00586.             | . | . | ENST0000.           | 21q22.13   |
| ACaP10  | 22 | 24750000 | 24770000 | 0 | 0 | SPECC1L-  | exonic     | NM_00114.             | . | . | ENST0000.           | 22q11.23   |
| ACaP10  | 22 | 29560000 | 29570000 | 0 | 0 | KREMEN1   | exonic     | NM_03204.             | . | . | ENST0000.           | 22q12.1    |
| ACaP10  | 22 | 41170000 | 41320000 | 0 | 0 | ST13,SLC; | exonic     | NM_00120.             | . | . | ENST0000 CpG: 88,C  | 22q13.2    |
| ACaP10  | 22 | 41320000 | 41460000 | 0 | 0 | RBX1,XPN  | exonic     | NM_01424.             | . | . | ENST0000 CpG: 93,C  | 22q13.2    |
| ACaP10X |    | 1730000  | 8550000  | 0 | 0 | VCX2,MIR  | exonic     | NM_00004.             | . | . | ENST0000 CpG: 146,( | Xp22.32-X  |
| ACaP10X |    | 8550000  | 8570000  | 0 | 0 | KAL1      | exonic     | NM_00021.             | . | . | ENST0000.           | Xp22.31    |
| ACaP10X |    | 49150000 | 49970000 | 0 | 0 | USP27X-A  | exonic     | NM_00008.             | . | . | ENST0000 CpG: 91,C  | Xp11.23-X  |
| ACaP10  | 3  | 51490000 | 51520000 | 0 | 0 | VPRBP     | exonic     | NM_00117.             | . | . | ENST0000.           | 3p21.2     |
| ACaP10  | 3  | 1.14E+08 | 1.14E+08 | 0 | 0 | GRAMD1C   | exonic     | NM_01757.             | . | . | ENST0000 CpG: 28    | 3q13.31    |
| ACaP10  | 4  | 9190000  | 9200000  | 0 | 0 | .         | intergenic | NM_00104 dist=23787.  | . | . | .                   | 4p16.1     |
| ACaP10  | 4  | 39550000 | 39580000 | 0 | 0 | SMIM14,M  | exonic     | NM_17492.             | . | . | ENST0000.           | 4p14       |
| ACaP10  | 4  | 1.09E+08 | 1.09E+08 | 0 | 0 | RPL34-AS  | ncRNA_ex   | NR_02696.             | . | . | ENST0000.           | 4q25       |
| ACaP10  | 4  | 1.29E+08 | 1.29E+08 | 0 | 0 | LARP1B,C  | exonic     | NM_00103.             | . | . | ENST0000 CpG: 186   | 4q28.2     |
| ACaP10  | 6  | 20400000 | 21240000 | 0 | 0 | E2F3,CDK  | exonic     | NM_00124.             | . | . | ENST0000 CpG: 156,( | 6p22.3     |



|       |    |          |          |   |   |                  |            |           |             |   |                     |            |
|-------|----|----------|----------|---|---|------------------|------------|-----------|-------------|---|---------------------|------------|
| ACaP1 | 6  | 31560000 | 31570000 | 0 | 0 | NCR3             | exonic     | NM_00114. | .           | . | ENST0000.           | 6p21.33    |
| ACaP1 | 6  | 33860000 | 34790000 | 0 | 0 | LINC01016        | exonic     | NM_00084. | .           | . | ENST0000 CpG: 37,C  | 6p21.31    |
| ACaP1 | 7  | 43430000 | 43450000 | 0 | 0 | HECW1            | exonic     | NM_00128. | .           | . | ENST0000.           | 7p13       |
| ACaP1 | 9  | 45080000 | 45090000 | 0 | 0 | .                | intergenic | NR_02742  | dist=88508. | . | .                   | 9p11.2     |
| ACaP1 | 9  | 74560000 | 74690000 | 0 | 0 | C9orf57,C        | exonic     | NM_00112. | .           | . | ENST0000.           | 9q21.13    |
| ACaP1 | 11 | 1250000  | 1280000  | 0 | 0 | MIR6744,N        | exonic     | NM_00245. | .           | . | ENST0000 CpG: 48,C  | 11p15.5    |
| ACaP1 | 11 | 1280000  | 1290000  | 0 | 0 | MUC5B            | exonic     | NM_00245. | .           | . | ENST0000.           | 11p15.5    |
| ACaP1 | 11 | 1.19E+08 | 1.19E+08 | 0 | 0 | CBL              | exonic     | NM_00518. | .           | . | ENST0000.           | 11q23.3    |
| ACaP1 | 12 | 7800000  | 7990000  | 0 | 0 | APOBEC1          | exonic     | NM_00114. | .           | . | ENST0000 CpG: 24    | 12p13.31   |
| ACaP1 | 13 | 28630000 | 28650000 | 0 | 0 | FLT3             | exonic     | NM_00411. | .           | . | ENST0000.           | 13q12.2    |
| ACaP1 | 13 | 99220000 | 99380000 | 0 | 0 | SLC15A1,†        | exonic     | NM_00103. | .           | . | ENST0000 CpG: 122   | 13q32.2-q3 |
| ACaP1 | 13 | 1.13E+08 | 1.13E+08 | 0 | 0 | ATP11A,C         | exonic     | NM_01520. | .           | . | ENST0000 CpG: 131   | 13q34      |
| ACaP1 | 15 | 47870000 | 50340000 | 0 | 0 | SLC12A1,†        | exonic     | NM_00013. | .           | . | ENST0000 CpG: 47,C  | 15q21.1-q2 |
| ACaP1 | 17 | 29810000 | 29830000 | 0 | 0 | RAB11FIP         | intronic   | NM_03293. | .           | . | ENST0000 CpG: 91    | 17q11.2    |
| ACaP1 | 18 | 90000    | 120000   | 0 | 0 | ROCK1P1,ncRNA_ex |            | NR_03377. | .           | . | ENST0000 CpG: 21    | 18p11.32   |
| ACaP1 | 19 | 5820000  | 5850000  | 0 | 0 | FUT6,NRT         | exonic     | NM_00014. | .           | . | ENST0000 CpG: 36,C  | 19p13.3    |
| ACaP1 | 19 | 15130000 | 15140000 | 0 | 0 | CCDC105          | exonic     | NM_17348. | .           | . | ENST0000 CpG: 42    | 19p13.12   |
| ACaP1 | 20 | 31940000 | 32670000 | 0 | 0 | PXMP4,AC         | exonic     | NM_00102. | .           | . | ENST0000 CpG: 97,C  | 20q11.22-c |
| ACaP1 | 20 | 32670000 | 32680000 | 0 | 0 | EIF2S2,RA        | exonic     | NM_00390. | .           | . | ENST0000.           | 20q11.22   |
| ACaP1 | 20 | 35650000 | 35770000 | 0 | 0 | RBL1,MRC         | exonic     | NM_00289. | .           | . | ENST0000 CpG: 52    | 20q11.23   |
| ACaP1 | 21 | 40690000 | 40700000 | 0 | 0 | BRWD1-A,ncRNA_ex |            | NR_04665. | .           | . | ENST0000.           | 21q22.2    |
| ACaP1 | 21 | 45130000 | 45140000 | 0 | 0 | PDXK             | exonic     | NM_00368. | .           | . | ENST0000 CpG: 156   | 21q22.3    |
| ACaP1 | X  | 47220000 | 47250000 | 0 | 0 | SNORA11†         | exonic     | NM_00344. | .           | . | ENST0000.           | Xp11.23    |
| ACaP1 | X  | 1E+08    | 1E+08    | 0 | 0 | TRMT2B,A         | exonic     | NM_00116. | .           | . | ENST0000 CpG: 27,C  | Xq22.1     |
| ACaP1 | X  | 1.19E+08 | 1.19E+08 | 0 | 0 | NDUFA1,N         | exonic     | NM_00100. | .           | . | ENST0000 CpG: 45,C  | Xq24       |
| ACaP1 | 1  | 860000   | 3650000  | 0 | 0 | MEGF6,MI         | exonic     | NM_00081. | .           | . | ENST0000 CpG: 27,C  | 1p36.33-p3 |
| ACaP1 | 1  | 47480000 | 53060000 | 0 | 0 | CYP4A22,†        | exonic     | NM_00100. | .           | . | ENST0000 CpG: 480,( | 1p32.3-p33 |
| ACaP1 | 1  | 55520000 | 1E+08    | 0 | 0 | DNAJB4,T         | exonic     | NM_00001. | .           | . | ENST0000 CpG: 139,( | 1p22.2-p32 |
| ACaP1 | 1  | 1E+08    | 1E+08    | 0 | 0 | AGL              | exonic     | NM_00002. | .           | . | ENST0000.           | 1p21.2     |
| ACaP1 | 1  | 1E+08    | 1.01E+08 | 0 | 0 | TRMT13,S         | exonic     | NM_00113. | .           | . | ENST0000 CpG: 36,C  | 1p21.2     |
| ACaP1 | 1  | 1.01E+08 | 1.09E+08 | 0 | 0 | RNU6-31P         | exonic     | NM_00069. | .           | . | ENST0000 CpG: 21,C  | 1p21.2-p13 |
| ACaP1 | 1  | 1.09E+08 | 1.1E+08  | 0 | 0 | CLCC1,FN         | exonic     | NM_00104. | .           | . | ENST0000 CpG: 61,C  | 1p13.3     |
| ACaP1 | 1  | 1.18E+08 | 1.19E+08 | 0 | 0 | WDR3,SP,†        | exonic     | NM_00113. | .           | . | ENST0000 CpG: 136,( | 1p12       |
| ACaP1 | 1  | 1.2E+08  | 1.21E+08 | 0 | 0 | HIST2H2B         | exonic     | NM_00100. | .           | . | ENST0000 CpG: 108,( | 1p11.2-p12 |
| ACaP1 | 1  | 1.21E+08 | 1.21E+08 | 0 | 0 | EMBP1,SF         | ncRNA_ex   | NR_00395. | .           | . | ENST0000 CpG: 132,( | 1p11.2     |

|        |   |          |          |   |   |           |            |           |             |   |           |                      |                |
|--------|---|----------|----------|---|---|-----------|------------|-----------|-------------|---|-----------|----------------------|----------------|
| ACaP1: | 1 | 1.21E+08 | 1.5E+08  | 0 | 0 | LINC00865 | exonic     | NM_00056. | .           | . | ENST0000  | CpG: 59,C 1q12-q11   |                |
| ACaP1: | 1 | 1.5E+08  | 1.58E+08 | 0 | 0 | SPRR1A,K  | exonic     | NM_00015. | .           | . | ENST0000  | CpG: 103,(1q21.2-q22 |                |
| ACaP1: | 1 | 1.58E+08 | 1.6E+08  | 0 | 0 | APCS,OR1  | exonic     | NM_00100. | .           | . | ENST0000  | CpG: 46,C 1q23.1-q23 |                |
| ACaP1: | 1 | 1.6E+08  | 1.6E+08  | 0 | 0 | .         | intergenic | NM_00163  | dist=1339;1 | . | .         | 1q23.2               |                |
| ACaP1: | 1 | 1.6E+08  | 1.62E+08 | 0 | 0 | PEX19,RP  | exonic     | NM_00030. | .           | . | ENST0000  | CpG: 25,C 1q23.3-q23 |                |
| ACaP1: | 1 | 1.62E+08 | 1.69E+08 | 0 | 0 | RCSD1,MI  | exonic     | NM_00069. | .           | . | ENST0000  | CpG: 115,(1q24.2-q24 |                |
| ACaP1: | 1 | 1.69E+08 | 1.74E+08 | 0 | 0 | METTLL11E | exonic     | NM_00013. | .           | . | ENST0000  | CpG: 60,C 1q24.3-q24 |                |
| ACaP1: | 1 | 1.74E+08 | 1.85E+08 | 0 | 0 | GM140,C1  | exonic     | NM_00043. | .           | . | ENST0000  | CpG: 67,C 1q25.1-q25 |                |
| ACaP1: | 1 | 1.85E+08 | 2.01E+08 | 0 | 0 | PTGS2,PL  | exonic     | NM_00018. | .           | . | ENST0000  | CpG: 80,C 1q31.2-q31 |                |
| ACaP1: | 1 | 2.01E+08 | 2.07E+08 | 0 | 0 | BTG2,KIS  | exonic     | NM_00006. | .           | . | ENST0000  | CpG: 22,C 1q32.2-q32 |                |
| ACaP1: | 1 | 2.07E+08 | 2.08E+08 | 0 | 0 | C4BPA,CF  | exonic     | NM_00057. | .           | . | ENST0000  | CpG: 72 1q32.2       |                |
| ACaP1: | 1 | 2.08E+08 | 2.15E+08 | 0 | 0 | LINC0053f | exonic     | NM_00022. | .           | . | ENST0000  | CpG: 207,(1q32.2-q41 |                |
| ACaP1: | 1 | 2.15E+08 | 2.15E+08 | 0 | 0 | PTPN14    | UTR5       | NM_00540  | NM_00540.   | . | .         | ENST0000             | CpG: 88,C 1q41 |
| ACaP1: | 1 | 2.15E+08 | 2.17E+08 | 0 | 0 | CENPF,KC  | exonic     | NM_00101. | .           | . | ENST0000  | CpG: 79,C 1q41       |                |
| ACaP1: | 1 | 2.17E+08 | 2.25E+08 | 0 | 0 | SLC30A10  | exonic     | NM_00103. | .           | . | ENST0000  | CpG: 77,C 1q42.12-q4 |                |
| ACaP1: | 1 | 2.25E+08 | 2.26E+08 | 0 | 0 | DNAH14    | exonic     | NM_00114. | .           | . | ENST0000. | 1q42.12              |                |
| ACaP1: | 1 | 2.26E+08 | 2.49E+08 | 0 | 0 | MIR6741,l | exonic     | NM_00002. | .           | . | ENST0000  | CpG: 149,(1q42.12-q4 |                |
| ACaP1: | 2 | 0        | 210000   | 0 | 0 | FAM110C   | exonic     | NM_00107. | .           | . | ENST0000  | CpG: 107,(2p25.3     |                |
| ACaP1: | 2 | 210000   | 12890000 | 0 | 0 | LOC10050  | exonic     | NM_00054. | .           | . | ENST0000  | CpG: 76,C 2p25.2-p25 |                |
| ACaP1: | 2 | 12890000 | 13530000 | 0 | 0 | LOC10050  | ncRNA_ex   | NR_03843. | .           | . | ENST0000. | 2p24.3               |                |
| ACaP1: | 2 | 13530000 | 20650000 | 0 | 0 | MSGN1,LA  | exonic     | NM_00100. | .           | . | ENST0000  | CpG: 163,(2p24.3-p24 |                |
| ACaP1: | 2 | 20650000 | 31630000 | 0 | 0 | PLB1,TRIM | exonic     | NM_00018. | .           | . | ENST0000  | CpG: 114,(2p23.3-p24 |                |
| ACaP1: | 2 | 31630000 | 44120000 | 0 | 0 | SULT6B1,t | exonic     | NM_00010. | .           | . | ENST0000  | CpG: 44,C 2p22.1-p22 |                |
| ACaP1: | 2 | 44120000 | 45830000 | 0 | 0 | SIX3,SLC3 | exonic     | NM_00034. | .           | . | ENST0000  | CpG: 18,C 2p21       |                |
| ACaP1: | 2 | 45830000 | 47660000 | 0 | 0 | MCFD2,AC  | exonic     | NM_00025. | .           | . | ENST0000  | CpG: 40,C 2p21       |                |
| ACaP1: | 2 | 47660000 | 68870000 | 0 | 0 | LOC33980  | exonic     | NM_00014. | .           | . | ENST0000  | CpG: 124,(2p14-p13.3 |                |
| ACaP1: | 2 | 68870000 | 75750000 | 0 | 0 | EVA1A,SP  | exonic     | NM_00018. | .           | . | ENST0000  | CpG: 75,C 2p13.2-p12 |                |
| ACaP1: | 2 | 75750000 | 75870000 | 0 | 0 | AC007099  | ncRNA_ex   | NR_11028. | .           | . | ENST0000  | CpG: 23,C 2p12       |                |
| ACaP1: | 2 | 75870000 | 85200000 | 0 | 0 | AC073628  | exonic     | NM_00100. | .           | . | ENST0000  | CpG: 32,C 2p12-p11.2 |                |
| ACaP1: | 2 | 85200000 | 85250000 | 0 | 0 | KCMF1     | intronic   | NM_02012. | .           | . | ENST0000. | 2p11.2               |                |
| ACaP1: | 2 | 85250000 | 86570000 | 0 | 0 | ATOX8,G   | exonic     | NM_00054. | .           | . | ENST0000  | CpG: 47,C 2p11.2     |                |
| ACaP1: | 2 | 86570000 | 86660000 | 0 | 0 | .         | intergenic | NM_00116  | dist=4794;1 | . | .         | ENST0000.            | 2p11.2         |
| ACaP1: | 2 | 86660000 | 86950000 | 0 | 0 | CHMP3,KI  | exonic     | NM_00100. | .           | . | ENST0000  | CpG: 135,(2p11.2     |                |
| ACaP1: | 2 | 86950000 | 86970000 | 0 | 0 | RMND5A    | exonic     | NM_02278. | .           | . | ENST0000. | 2p11.2               |                |
| ACaP1: | 2 | 86970000 | 89200000 | 0 | 0 | FOXI3,LO  | exonic     | NM_00102. | .           | . | ENST0000  | CpG: 34,C 2p11.2     |                |

|        |   |          |          |   |   |           |            |           |             |   |   |           |                      |
|--------|---|----------|----------|---|---|-----------|------------|-----------|-------------|---|---|-----------|----------------------|
| ACaP1: | 2 | 89200000 | 89240000 | 0 | 0 | .         | intergenic | NR_03963  | dist=88032. | . | . | .         | 2p11.2               |
| ACaP1: | 2 | 89240000 | 96610000 | 0 | 0 | LINC00342 | exonic     | NM_00101. | .           | . | . | ENST0000  | CpG: 65,C 2q11.1-p11 |
| ACaP1: | 2 | 97610000 | 98290000 | 0 | 0 | FAHD2B,L  | exonic     | NM_00112. | .           | . | . | ENST0000  | CpG: 48,C 2q11.2     |
| ACaP1: | 2 | 98290000 | 1.29E+08 | 0 | 0 | RALB,SUL  | exonic     | NM_00012. | .           | . | . | ENST0000  | CpG: 69,C 2q12.2-q12 |
| ACaP1: | 2 | 1.29E+08 | 1.31E+08 | 0 | 0 | UGGT1,R/  | exonic     | NM_00109. | .           | . | . | ENST0000  | CpG: 34,C 2q21.1-q14 |
| ACaP1: | 2 | 1.31E+08 | 1.31E+08 | 0 | 0 | MED15P9,  | ncRNA_ex   | NR_03390. | .           | . | . | ENST0000. | 2q21.1               |
| ACaP1: | 2 | 1.31E+08 | 1.32E+08 | 0 | 0 | TUBA3D,C  | exonic     | NM_00100. | .           | . | . | ENST0000  | CpG: 59,C 2q21.1     |
| ACaP1: | 2 | 1.32E+08 | 1.38E+08 | 0 | 0 | MGAT5,LC  | exonic     | NM_00100. | .           | . | . | ENST0000  | CpG: 52,C 2q21.2-q21 |
| ACaP1: | 2 | 1.38E+08 | 1.59E+08 | 0 | 0 | MIR4773-2 | exonic     | NM_00040. | .           | . | . | ENST0000  | CpG: 69,C 2q22.3-q22 |
| ACaP1: | 2 | 1.6E+08  | 1.98E+08 | 0 | 0 | OSGEPL1   | exonic     | NM_00007. | .           | . | . | ENST0000  | CpG: 93,C 2q31.1-q24 |
| ACaP1: | 2 | 1.98E+08 | 2.11E+08 | 0 | 0 | BMPR2,IC  | exonic     | NM_00100. | .           | . | . | ENST0000  | CpG: 94,C 2q33.2-q34 |
| ACaP1: | 2 | 2.11E+08 | 2.16E+08 | 0 | 0 | CPS1,CPS  | exonic     | NM_00046. | .           | . | . | ENST0000  | CpG: 180,(2q34-q35   |
| ACaP1: | 3 | 0        | 9010000  | 0 | 0 | EGOT,CN   | exonic     | NM_00056. | .           | . | . | ENST0000  | CpG: 43,C 3p26.3-p26 |
| ACaP1: | 3 | 15710000 | 31700000 | 0 | 0 | TBC1D5,R  | exonic     | NM_00046. | .           | . | . | ENST0000  | CpG: 129,(3p25.1-p25 |
| ACaP1: | 3 | 31700000 | 36940000 | 0 | 0 | DYNC1LI1  | exonic     | NM_00040. | .           | . | . | ENST0000  | CpG: 68,C 3p23-p22.2 |
| ACaP1: | 3 | 36940000 | 37070000 | 0 | 0 | EPM2AIP1  | exonic     | NM_00024. | .           | . | . | ENST0000  | CpG: 93,C 3p22.2     |
| ACaP1: | 3 | 37070000 | 37080000 | 0 | 0 | MLH1      | exonic     | NM_00024. | .           | . | . | ENST0000. | 3p22.2               |
| ACaP1: | 3 | 43590000 | 44890000 | 0 | 0 | TCAIM,ZN  | exonic     | NM_00102. | .           | . | . | ENST0000  | CpG: 24,C 3p22.1-p21 |
| ACaP1: | 3 | 52460000 | 52480000 | 0 | 0 | SEMA3G    | exonic     | NM_02016. | .           | . | . | ENST0000. | 3p21.1               |
| ACaP1: | 3 | 54150000 | 75720000 | 0 | 0 | GPR27,TV  | exonic     | NM_00024. | .           | . | . | ENST0000  | CpG: 66,C 3p21.1-p13 |
| ACaP1: | 3 | 75720000 | 1E+08    | 0 | 0 | DCBLD2,T  | exonic     | NM_00009. | .           | . | . | ENST0000  | CpG: 27,C 3p12.1-p12 |
| ACaP1: | 3 | 1E+08    | 1.09E+08 | 0 | 0 | SEN7,DZ   | exonic     | NM_00098. | .           | . | . | ENST0000  | CpG: 38,C 3q12.2-q13 |
| ACaP1: | 3 | 1.09E+08 | 1.23E+08 | 0 | 0 | LINC0048f | exonic     | NM_00018. | .           | . | . | ENST0000  | CpG: 56,C 3q13.33-q1 |
| ACaP1: | 3 | 1.3E+08  | 1.33E+08 | 0 | 0 | SNORA58   | exonic     | NM_00100. | .           | . | . | ENST0000  | CpG: 83,C 3q22.1     |
| ACaP1: | 3 | 1.33E+08 | 1.41E+08 | 0 | 0 | TOPBP1,P  | exonic     | NM_00053. | .           | . | . | ENST0000  | CpG: 24,C 3q22.1-q22 |
| ACaP1: | 3 | 1.41E+08 | 1.58E+08 | 0 | 0 | PLOD2,PA  | exonic     | NM_00009. | .           | . | . | ENST0000  | CpG: 60,C 3q25.2-q25 |
| ACaP1: | 3 | 1.58E+08 | 1.58E+08 | 0 | 0 | RP11-538f | exonic     | NM_00113. | .           | . | . | ENST0000  | CpG: 44,C 3q25.32    |
| ACaP1: | 3 | 1.58E+08 | 1.59E+08 | 0 | 0 | RARRES1   | exonic     | NM_00288. | .           | . | . | ENST0000  | CpG: 98 3q25.32      |
| ACaP1: | 3 | 1.59E+08 | 1.83E+08 | 0 | 0 | GPR160,M  | exonic     | NM_00005. | .           | . | . | ENST0000  | CpG: 55,C 3q26.2-q26 |
| ACaP1: | 3 | 1.84E+08 | 1.89E+08 | 0 | 0 | RPL39L,Al | exonic     | NM_00041. | .           | . | . | ENST0000  | CpG: 32,C 3q27.2-q27 |
| ACaP1: | 3 | 1.89E+08 | 1.91E+08 | 0 | 0 | MIR944,Gl | exonic     | NM_00111. | .           | . | . | ENST0000  | CpG: 63,C 3q28       |
| ACaP1: | 3 | 1.91E+08 | 1.92E+08 | 0 | 0 | FGF12,CC  | exonic     | NM_00108. | .           | . | . | ENST0000  | CpG: 24 3q28         |
| ACaP1: | 3 | 1.92E+08 | 1.92E+08 | 0 | 0 | FGF12     | exonic     | NM_00411. | .           | . | . | ENST0000. | 3q28                 |
| ACaP1: | 3 | 1.92E+08 | 1.92E+08 | 0 | 0 | FGF12     | intronic   | NM_00411. | .           | . | . | ENST0000. | 3q28                 |
| ACaP1: | 3 | 1.92E+08 | 1.94E+08 | 0 | 0 | ATP13A5,l | exonic     | NM_00108. | .           | . | . | ENST0000  | CpG: 42,C 3q28-q29   |

|        |   |          |          |   |   |                    |                                 |   |   |           |            |            |
|--------|---|----------|----------|---|---|--------------------|---------------------------------|---|---|-----------|------------|------------|
| ACaP1: | 3 | 1.94E+08 | 1.94E+08 | 0 | 0 | LINC00884,ncRNA_ex | NR_03392.                       | . | . | ENST0000  | CpG: 129   | 3q29       |
| ACaP1: | 3 | 1.95E+08 | 1.96E+08 | 0 | 0 | MUC20,AC           | exonic NM_00128.                | . | . | ENST0000  | CpG: 38,C  | 3q29       |
| ACaP1: | 3 | 1.96E+08 | 1.96E+08 | 0 | 0 | .                  | downstream NM_00101.            | . | . | ENST0000  | CpG: 27    | 3q29       |
| ACaP1: | 3 | 1.96E+08 | 1.97E+08 | 0 | 0 | MIR4797,F          | exonic NM_00101.                | . | . | ENST0000  | CpG: 137,( | 3q29       |
| ACaP1: | 3 | 1.97E+08 | 1.97E+08 | 0 | 0 | FYTDD1,K           | exonic NM_00114.                | . | . | ENST0000  | CpG: 94,C  | 3q29       |
| ACaP1: | 3 | 1.97E+08 | 1.98E+08 | 0 | 0 | LRCH3,LM           | exonic NM_00099.                | . | . | ENST0000  | CpG: 160,( | 3q29       |
| ACaP1: | 3 | 1.98E+08 | 1.98E+08 | 0 | 0 | .                  | intergenic NM_00114 dist=52272. | . | . | .         | .          | 3q29       |
| ACaP1: | 4 | 0        | 50000    | 0 | 0 | .                  | intergenic NONE,NM, dist=NONE.  | . | . | ENST0000. | .          | 4p16.3     |
| ACaP1: | 4 | 50000    | 1820000  | 0 | 0 | PDE6B,FG           | exonic NM_00014.                | . | . | ENST0000  | CpG: 123,( | 4p16.3     |
| ACaP1: | 4 | 3430000  | 3510000  | 0 | 0 | RGS12,HC           | exonic NM_00116.                | . | . | ENST0000  | CpG: 24,C  | 4p16.3     |
| ACaP1: | 4 | 9210000  | 9470000  | 0 | 0 | USP17L22           | exonic NM_00104.                | . | . | ENST0000  | CpG: 34    | 4p16.1     |
| ACaP1: | 4 | 10110000 | 41360000 | 0 | 0 | LOC10050           | exonic NM_00032.                | . | . | ENST0000  | CpG: 94,C  | 4p15.33-p1 |
| ACaP1: | 4 | 41360000 | 65140000 | 0 | 0 | ERVMER3            | exonic NM_00008.                | . | . | ENST0000  | CpG: 79,C  | 4q11-q12   |
| ACaP1: | 4 | 65140000 | 71210000 | 0 | 0 | CENPC,Tl           | exonic NM_00020.                | . | . | ENST0000  | CpG: 51,C  | 4q13.1-q13 |
| ACaP1: | 4 | 71210000 | 90830000 | 0 | 0 | AREG,NA/           | exonic NM_00029.                | . | . | ENST0000  | CpG: 47,C  | 4q21.3-q21 |
| ACaP1: | 4 | 90830000 | 94440000 | 0 | 0 | CCSER1,C           | exonic NM_00114.                | . | . | ENST0000  | CpG: 122,( | 4q22.1-q22 |
| ACaP1: | 4 | 94440000 | 1.59E+08 | 0 | 0 | PP12613,L          | exonic NM_00013.                | . | . | ENST0000  | CpG: 95,C  | 4q24-q28.1 |
| ACaP1: | 4 | 1.59E+08 | 1.84E+08 | 0 | 0 | NPY1R,HF           | exonic NM_00002.                | . | . | ENST0000  | CpG: 41,C  | 4q34.2-q34 |
| ACaP1: | 4 | 1.91E+08 | 1.91E+08 | 0 | 0 | DUX2,DU\           | exonic NM_00112.                | . | . | ENST0000  | CpG: 2005  | 4q35.2     |
| ACaP1: | 4 | 1.91E+08 | 1.91E+08 | 0 | 0 | .                  | intergenic NM_03317 dist=6558;t | . | . | .         | .          | 4q35.2     |
| ACaP1: | 5 | 0        | 150000   | 0 | 0 | PLEKHG4I           | exonic NM_05290.                | . | . | ENST0000  | CpG: 108,( | 5p15.33    |
| ACaP1: | 5 | 150000   | 35050000 | 0 | 0 | SNHG18,C           | exonic NM_00090.                | . | . | ENST0000  | CpG: 470,( | 5p15.31-p1 |
| ACaP1: | 5 | 35050000 | 35060000 | 0 | 0 | PRLR               | UTR3 NM_00094 NM_00094.         | . | . | ENST0000. | .          | 5p13.2     |
| ACaP1: | 5 | 35060000 | 66490000 | 0 | 0 | ESM1,C5o           | exonic NM_00006.                | . | . | ENST0000  | CpG: 48,C  | 5q12.1-p13 |
| ACaP1: | 5 | 66490000 | 70540000 | 0 | 0 | SMN1,MAf           | exonic NM_00034.                | . | . | ENST0000  | CpG: 34,C  | 5q12.3-q13 |
| ACaP1: | 5 | 70540000 | 80560000 | 0 | 0 | PDE8B,BT           | exonic NM_00004.                | . | . | ENST0000  | CpG: 148,( | 5q13.2-q13 |
| ACaP1: | 5 | 80560000 | 1.31E+08 | 0 | 0 | COX7C,SS           | exonic NM_00003.                | . | . | ENST0000  | CpG: 39,C  | 5q21.3-q15 |
| ACaP1: | 5 | 1.31E+08 | 1.46E+08 | 0 | 0 | UQCRQ,W            | exonic NM_00017.                | . | . | ENST0000  | CpG: 102,( | 5q32-q31.3 |
| ACaP1: | 5 | 1.46E+08 | 1.48E+08 | 0 | 0 | SPINK1,H           | exonic NM_00087.                | . | . | ENST0000  | CpG: 67,C  | 5q32       |
| ACaP1: | 5 | 1.51E+08 | 1.7E+08  | 0 | 0 | MAT2B,NL           | exonic NM_00017.                | . | . | ENST0000  | CpG: 27,C  | 5q33.1-q35 |
| ACaP1: | 5 | 1.7E+08  | 1.71E+08 | 0 | 0 | MIR3912,h          | exonic NM_00103.                | . | . | ENST0000  | CpG: 411,( | 5q35.1     |
| ACaP1: | 5 | 1.71E+08 | 1.8E+08  | 0 | 0 | ERGIC1,El          | exonic NM_00050.                | . | . | ENST0000  | CpG: 128,( | 5q35.2-q35 |
| ACaP1: | 6 | 0        | 8050000  | 0 | 0 | C6orf195,E         | exonic NM_00012.                | . | . | ENST0000  | CpG: 392,( | 6p25.3-p25 |
| ACaP1: | 6 | 8050000  | 10410000 | 0 | 0 | TFAP2A,B           | exonic NM_00103.                | . | . | ENST0000  | CpG: 35,C  | 6p24.3     |
| ACaP1: | 6 | 10410000 | 28980000 | 0 | 0 | HIST1H1T           | exonic NM_00033.                | . | . | ENST0000  | CpG: 32,C  | 6p23-p22.3 |

|        |   |          |          |   |   |                  |            |                       |   |   |                     |             |
|--------|---|----------|----------|---|---|------------------|------------|-----------------------|---|---|---------------------|-------------|
| ACaP1: | 6 | 28980000 | 29010000 | 0 | 0 | LOC10012 UTR5    | NM_00119   | NM_00119.             | . | . | CpG: 23             | 6p22.1      |
| ACaP1: | 6 | 29010000 | 29370000 | 0 | 0 | OR2W1,Ol exonic  | NM_00100.  | .                     | . | . | ENST0000 CpG: 42    | 6p22.1      |
| ACaP1: | 6 | 38700000 | 38980000 | 0 | 0 | DNAH8,RF exonic  | NM_00120.  | .                     | . | . | ENST0000.           | 6p21.2      |
| ACaP1: | 6 | 44310000 | 54180000 | 0 | 0 | OPN5,LOC exonic  | NM_00025.  | .                     | . | . | ENST0000 CpG: 165,( | 6p12.1-p21  |
| ACaP1: | 6 | 54180000 | 54190000 | 0 | 0 | TINAG exonic     | NM_01446.  | .                     | . | . | ENST0000.           | 6p12.1      |
| ACaP1: | 6 | 54190000 | 66020000 | 0 | 0 | LGSN,HCF exonic  | NM_00094.  | .                     | . | . | ENST0000 CpG: 83,C  | 6q11.2-q11  |
| ACaP1: | 6 | 66020000 | 81060000 | 0 | 0 | OGFRL1,lexonic   | NM_00005.  | .                     | . | . | ENST0000 CpG: 32,C  | 6q12-q13    |
| ACaP1: | 6 | 81060000 | 82450000 | 0 | 0 | .                | intergenic | NM_00005 dist=4013;1. | . | . | ENST0000.           | 6q14.1      |
| ACaP1: | 6 | 82450000 | 83080000 | 0 | 0 | IBTK,TPB( exonic | NM_00116.  | .                     | . | . | ENST0000 CpG: 49,C  | 6q14.1      |
| ACaP1: | 6 | 83080000 | 83770000 | 0 | 0 | UBE3D exonic     | NM_19892.  | .                     | . | . | ENST0000.           | 6q14.1      |
| ACaP1: | 6 | 83770000 | 83860000 | 0 | 0 | DOPEY1,L exonic  | NM_00119.  | .                     | . | . | ENST0000 CpG: 48,C  | 6q14.1      |
| ACaP1: | 6 | 83860000 | 83920000 | 0 | 0 | RWDD2A,l exonic  | NM_00119.  | .                     | . | . | ENST0000 CpG: 113   | 6q14.1-q14  |
| ACaP1: | 6 | 91300000 | 1.05E+08 | 0 | 0 | FBXL4,EPl exonic | NM_00101.  | .                     | . | . | ENST0000 CpG: 51,C  | 6q15-q16.2  |
| ACaP1: | 6 | 1.05E+08 | 1.17E+08 | 0 | 0 | LINC00222 exonic | NM_00049.  | .                     | . | . | ENST0000 CpG: 147,( | 6q21-q16.3  |
| ACaP1: | 6 | 1.17E+08 | 1.39E+08 | 0 | 0 | ENPP3,PE exonic  | NM_00004.  | .                     | . | . | ENST0000 CpG: 88,C  | 6q23.2-q22  |
| ACaP1: | 6 | 1.39E+08 | 1.43E+08 | 0 | 0 | NHSL1,MII exonic | NM_00107.  | .                     | . | . | ENST0000 CpG: 94,C  | 6q24.1-q23  |
| ACaP1: | 6 | 1.43E+08 | 1.48E+08 | 0 | 0 | HIVEP2,Sf exonic | NM_00101.  | .                     | . | . | ENST0000 CpG: 92,C  | 6q24.2-q24  |
| ACaP1: | 6 | 1.48E+08 | 1.48E+08 | 0 | 0 | SAMD5 intronic   | NM_00103.  | .                     | . | . | ENST0000.           | 6q24.3      |
| ACaP1: | 6 | 1.48E+08 | 1.71E+08 | 0 | 0 | SNORA29, exonic  | NM_00012.  | .                     | . | . | ENST0000 CpG: 105,( | 6q27-q25.3  |
| ACaP1: | 6 | 1.71E+08 | 1.71E+08 | 0 | 0 | .                | intergenic | NM_00259 dist=16622.  | . | . | .                   | 6q27        |
| ACaP1: | 7 | 0        | 10000    | 0 | 0 | .                | intergenic | NONE,NR_ dist=NONE.   | . | . | .                   | 7p22.3      |
| ACaP1: | 7 | 10000    | 300000   | 0 | 0 | LOC10050 exonic  | NM_02022.  | .                     | . | . | ENST0000 CpG: 35,C  | 7p22.3      |
| ACaP1: | 7 | 300000   | 320000   | 0 | 0 | FAM20C UTR3      | NM_02022   | NM_02022.             | . | . | ENST0000 CpG: 25,C  | 7p22.3      |
| ACaP1: | 7 | 320000   | 2060000  | 0 | 0 | PSMG3,TF exonic  | NM_00101.  | .                     | . | . | ENST0000 CpG: 25,C  | 7p22.3      |
| ACaP1: | 7 | 7100000  | 21860000 | 0 | 0 | NDUFA4,lexonic   | NM_00047.  | .                     | . | . | ENST0000 CpG: 39,C  | 7p15.3-p21  |
| ACaP1: | 7 | 21860000 | 41540000 | 0 | 0 | NEUROD6 exonic   | NM_00052.  | .                     | . | . | ENST0000 CpG: 22,C  | 7p15.1-p14  |
| ACaP1: | 7 | 48230000 | 50170000 | 0 | 0 | CDC14C,Z exonic  | NM_00115.  | .                     | . | . | ENST0000 CpG: 251,( | 7p12.3-p12  |
| ACaP1: | 7 | 56420000 | 65120000 | 0 | 0 | ERV3-1,ZI exonic | NM_00100.  | .                     | . | . | ENST0000 CpG: 62,C  | 7q11.1-p11  |
| ACaP1: | 7 | 65120000 | 72340000 | 0 | 0 | WBSCR17 exonic   | NM_00004.  | .                     | . | . | ENST0000 CpG: 79,C  | 7q11.21-q11 |
| ACaP1: | 7 | 76710000 | 97500000 | 0 | 0 | PTPN12,R exonic  | NM_00007.  | .                     | . | . | ENST0000 CpG: 59,C  | 7q21.13-q2  |
| ACaP1: | 7 | 1.02E+08 | 1.03E+08 | 0 | 0 | DPY19L2F exonic  | NM_00103.  | .                     | . | . | ENST0000 CpG: 78,C  | 7q22.1      |
| ACaP1: | 7 | 1.03E+08 | 1.21E+08 | 0 | 0 | TES,RELN exonic  | NM_00010.  | .                     | . | . | ENST0000 CpG: 98,C  | 7q31.1-q22  |
| ACaP1: | 7 | 1.21E+08 | 1.27E+08 | 0 | 0 | LOC15487 exonic  | NM_00084.  | .                     | . | . | ENST0000 CpG: 81,C  | 7q31.31-q3  |
| ACaP1: | 7 | 1.4E+08  | 1.42E+08 | 0 | 0 | TAS2R38,l exonic | NM_00100.  | .                     | . | . | ENST0000 CpG: 34,C  | 7q34        |
| ACaP1: | 7 | 1.44E+08 | 1.47E+08 | 0 | 0 | CNTNAP2, exonic  | NM_00104.  | .                     | . | . | ENST0000 CpG: 48,C  | 7q35        |

|        |   |          |          |   |   |            |            |           |              |   |           |            |            |
|--------|---|----------|----------|---|---|------------|------------|-----------|--------------|---|-----------|------------|------------|
| ACaP1: | 8 | 6830000  | 8650000  | 0 | 0 | ZNF705B,I  | exonic     | NM_00103. | .            | . | ENST0000  | CpG: 56,C  | 8p23.1     |
| ACaP1: | 8 | 8650000  | 8990000  | 0 | 0 | MFHAS1,I   | exonic     | NM_00422. | .            | . | ENST0000  | CpG: 197,( | 8p23.1     |
| ACaP1: | 8 | 12550000 | 18500000 | 0 | 0 | DLC1,RP1   | exonic     | NM_00001. | .            | . | ENST0000  | CpG: 83,C  | 8p22-p23.1 |
| ACaP1: | 8 | 24160000 | 24390000 | 0 | 0 | ADAM28,A   | exonic     | NM_00114. | .            | . | ENST0000. |            | 8p21.2     |
| ACaP1: | 8 | 24390000 | 38840000 | 0 | 0 | MIR4288,E  | exonic     | NM_00002. | .            | . | ENST0000  | CpG: 82,C  | 8p21.1-p12 |
| ACaP1: | 8 | 38840000 | 39680000 | 0 | 0 | ADAM9,AI   | exonic     | NM_00102. | .            | . | ENST0000  | CpG: 47,C  | 8p11.22    |
| ACaP1: | 8 | 49630000 | 86550000 | 0 | 0 | SNTG1,PF   | exonic     | NM_00006. | .            | . | ENST0000  | CpG: 80,C  | 8q21.13-q1 |
| ACaP1: | 8 | 86550000 | 86840000 | 0 | 0 | REXO1L2f   | ncRNA_ex   | NR_00359. | .            | . | ENST0000  | CpG: 129,( | 8q21.2     |
| ACaP1: | 8 | 86840000 | 87220000 | 0 | 0 | REXO1L2f   | exonic     | NM_03312. | .            | . | ENST0000  | CpG: 130,( | 8q21.2-q21 |
| ACaP1: | 8 | 87220000 | 1.11E+08 | 0 | 0 | ABRA,RG    | exonic     | NM_00098. | .            | . | ENST0000  | CpG: 98,C  | 8q22.2-q22 |
| ACaP1: | 8 | 1.11E+08 | 1.13E+08 | 0 | 0 | .          | intergenic | NM_01437  | dist=3041;1. | . | ENST0000. |            | 8q23.2-q23 |
| ACaP1: | 8 | 1.13E+08 | 1.14E+08 | 0 | 0 | MIR2053,C  | exonic     | NM_05290. | .            | . | ENST0000. |            | 8q23.3     |
| ACaP1: | 8 | 1.14E+08 | 1.34E+08 | 0 | 0 | ADCY8,MI   | exonic     | NM_00012. | .            | . | ENST0000  | CpG: 21,C  | 8q24.22-q2 |
| ACaP1: | 8 | 1.42E+08 | 1.44E+08 | 0 | 0 | ZFP41,LY   | exonic     | NM_00049. | .            | . | ENST0000  | CpG: 29,C  | 8q24.3     |
| ACaP1: | 8 | 1.44E+08 | 1.44E+08 | 0 | 0 | TOP1MT,F   | ncRNA_ex   | NR_02678. | .            | . | ENST0000  | CpG: 68    | 8q24.3     |
| ACaP1: | 8 | 1.44E+08 | 1.46E+08 | 0 | 0 | CYC1,PUF   | exonic     | NM_00044. | .            | . | ENST0000  | CpG: 95,C  | 8q24.3     |
| ACaP1: | 8 | 1.46E+08 | 1.46E+08 | 0 | 0 | ARHGAP3    | intronic   | NM_02525. | .            | . | ENST0000  | CpG: 20,C  | 8q24.3     |
| ACaP1: | 9 | 0        | 10000    | 0 | 0 | .          | intergenic | NONE,NR_  | dist=NONE.   | . | .         | .          | 9p24.3     |
| ACaP1: | 9 | 10000    | 180000   | 0 | 0 | WASH1,DI   | exonic     | NM_00114. | .            | . | ENST0000  | CpG: 210,( | 9p24.3     |
| ACaP1: | 9 | 2160000  | 16440000 | 0 | 0 | RLN2,RAN   | exonic     | NM_00017. | .            | . | ENST0000  | CpG: 84,C  | 9p24.1-p24 |
| ACaP1: | 9 | 16440000 | 16690000 | 0 | 0 | BNC2       | exonic     | NM_01763. | .            | . | ENST0000. |            | 9p22.3-p22 |
| ACaP1: | 9 | 16870000 | 32640000 | 0 | 0 | IFNA17,AC  | exonic     | NM_00007. | .            | . | ENST0000  | CpG: 54,C  | 9p21.1-p22 |
| ACaP1: | 9 | 38610000 | 41530000 | 0 | 0 | SPATA31A   | exonic     | NM_00104. | .            | . | ENST0000  | CpG: 37,C  | 9p12-p13.1 |
| ACaP1: | 9 | 41530000 | 41580000 | 0 | 0 | .          | intergenic | NM_00111  | dist=23075.  | . | ENST0000. |            | 9p12       |
| ACaP1: | 9 | 41580000 | 71010000 | 0 | 0 | SPATA31A   | exonic     | NM_00101. | .            | . | ENST0000  | CpG: 29,C  | 9q21.11-q1 |
| ACaP1: | 9 | 71010000 | 71110000 | 0 | 0 | PGM5       | exonic     | NM_02196. | .            | . | ENST0000. |            | 9q21.11    |
| ACaP1: | 9 | 71110000 | 95470000 | 0 | 0 | SEMA4D,T   | exonic     | NM_00014. | .            | . | ENST0000  | CpG: 70,C  | 9q21.13-q2 |
| ACaP1: | 9 | 95470000 | 95780000 | 0 | 0 | ANKRD19I   | exonic     | NM_00100. | .            | . | ENST0000  | CpG: 219,( | 9q22.31    |
| ACaP1: | 9 | 95780000 | 95850000 | 0 | 0 | FGD3,SU    | exonic     | NM_00108. | .            | . | ENST0000  | CpG: 84    | 9q22.31    |
| ACaP1: | 9 | 95850000 | 96870000 | 0 | 0 | C9orf129,E | exonic     | NM_00109. | .            | . | ENST0000  | CpG: 49,C  | 9q22.31-q2 |
| ACaP1: | 9 | 96870000 | 1.01E+08 | 0 | 0 | LOC44145   | exonic     | NM_00013. | .            | . | ENST0000  | CpG: 53,C  | 9q22.32-q2 |
| ACaP1: | 9 | 1.02E+08 | 1.02E+08 | 0 | 0 | TGFBR1     | exonic     | NM_00113. | .            | . | ENST0000. |            | 9q22.33    |
| ACaP1: | 9 | 1.02E+08 | 1.03E+08 | 0 | 0 | NAMA,ER    | exonic     | NM_00113. | .            | . | ENST0000  | CpG: 70,C  | 9q22.33-q2 |
| ACaP1: | 9 | 1.03E+08 | 1.15E+08 | 0 | 0 | SVEP1,TX   | exonic     | NM_00003. | .            | . | ENST0000  | CpG: 115,( | 9q31.3-q31 |
| ACaP1: | 9 | 1.15E+08 | 1.27E+08 | 0 | 0 | ZNF618,AI  | exonic     | NM_00003. | .            | . | ENST0000  | CpG: 239,( | 9q32-q33.3 |

|        |    |          |          |   |   |                              |                   |                       |                               |
|--------|----|----------|----------|---|---|------------------------------|-------------------|-----------------------|-------------------------------|
| ACaP1: | 9  | 1.39E+08 | 1.39E+08 | 0 | 0 | SOHLH1,K exonic              | NM_00101.         | .                     | ENST0000 CpG: 56,C 9q34.3     |
| ACaP1: | 9  | 1.39E+08 | 1.39E+08 | 0 | 0 | .                            | intergenic        | NM_01617 dist=6774;1. | CpG: 58,C 9q34.3              |
| ACaP1: | 9  | 1.39E+08 | 1.4E+08  | 0 | 0 | PTGDS,TF exonic              | NM_00060.         | .                     | ENST0000 CpG: 147,(19q34.3    |
| ACaP1: | 9  | 1.41E+08 | 1.41E+08 | 0 | 0 | FAM157B, exonic              | NM_00114.         | .                     | ENST0000 CpG: 27,C 9q34.3     |
| ACaP1: | 9  | 1.41E+08 | 1.41E+08 | 0 | 0 | .                            | intergenic        | NM_00114 dist=5828;1. | ENST0000. 9q34.3              |
| ACaP1: | 10 | 0        | 90000    | 0 | 0 | .                            | intergenic        | NONE,NM dist=NONE.    | . 10p15.3                     |
| ACaP1: | 10 | 90000    | 100000   | 0 | 0 | TUBB8 exonic                 | NM_17798.         | .                     | ENST0000 CpG: 64 10p15.3      |
| ACaP1: | 10 | 100000   | 280000   | 0 | 0 | ZMYND11 exonic               | NM_00120.         | .                     | ENST0000 CpG: 165,(10p15.3    |
| ACaP1: | 10 | 280000   | 11660000 | 0 | 0 | PRR26,ITII exonic            | NM_00041.         | .                     | ENST0000 CpG: 97,C 10p14-p15  |
| ACaP1: | 10 | 11890000 | 12080000 | 0 | 0 | PROSER2 exonic               | NM_01554.         | .                     | ENST0000 CpG: 80,C 10p14      |
| ACaP1: | 10 | 12080000 | 12150000 | 0 | 0 | UPF2,DHT exonic              | NM_01870.         | .                     | ENST0000 CpG: 96,C 10p14      |
| ACaP1: | 10 | 15560000 | 27070000 | 0 | 0 | MLLT10,P <sup>r</sup> exonic | NM_00072.         | .                     | ENST0000 CpG: 71,C 10p12.33-f |
| ACaP1: | 10 | 27070000 | 27140000 | 0 | 0 | ABI1 exonic                  | NM_00101.         | .                     | ENST0000. 10p12.1             |
| ACaP1: | 10 | 27140000 | 28290000 | 0 | 0 | ACBD5,PT exonic              | NM_00101.         | .                     | ENST0000 CpG: 72,C 10p12.1    |
| ACaP1: | 10 | 28290000 | 28340000 | 0 | 0 | MPP7 UTR3                    | NM_17349NM_17349. | .                     | ENST0000. 10p12.1             |
| ACaP1: | 10 | 28340000 | 28910000 | 0 | 0 | MIR5586,V exonic             | NM_01662.         | .                     | ENST0000 CpG: 60,C 10p12.1    |
| ACaP1: | 10 | 31160000 | 43310000 | 0 | 0 | LINC0083f exonic             | NM_00100.         | .                     | ENST0000 CpG: 238,(10p11.23-f |
| ACaP1: | 10 | 43310000 | 46130000 | 0 | 0 | LINC0061f exonic             | NM_00060.         | .                     | ENST0000 CpG: 21,C 10q11.22-c |
| ACaP1: | 10 | 46130000 | 46170000 | 0 | 0 | ZFAND4 exonic                | NM_00112.         | .                     | ENST0000 CpG: 104 10q11.22    |
| ACaP1: | 10 | 46170000 | 49380000 | 0 | 0 | LOC10099 exonic              | NM_00101.         | .                     | ENST0000 CpG: 102,(10q11.22   |
| ACaP1: | 10 | 49380000 | 49690000 | 0 | 0 | FRMPD2,A exonic              | NM_00101.         | .                     | ENST0000 CpG: 16,C 10q11.22   |
| ACaP1: | 10 | 50570000 | 68290000 | 0 | 0 | AGAP7,CE exonic              | NM_00012.         | .                     | ENST0000 CpG: 87,C 10q21.2-q2 |
| ACaP1: | 10 | 68290000 | 69360000 | 0 | 0 | CTNNA3,L exonic              | NM_00112.         | .                     | ENST0000. 10q21.3             |
| ACaP1: | 10 | 69360000 | 69910000 | 0 | 0 | DNAJC12, exonic              | NM_00112.         | .                     | ENST0000 CpG: 39,C 10q21.3    |
| ACaP1: | 10 | 89260000 | 93810000 | 0 | 0 | LINC0086f exonic             | NM_00004.         | .                     | ENST0000 CpG: 101,(10q23.31-c |
| ACaP1: | 10 | 93810000 | 98090000 | 0 | 0 | SORBS1,C exonic              | NM_00076.         | .                     | ENST0000 CpG: 26,C 10q23.33-c |
| ACaP1: | 10 | 1.06E+08 | 1.21E+08 | 0 | 0 | PDCD4,C <sup>A</sup> exonic  | NM_00049.         | .                     | ENST0000 CpG: 172,(10q25.1-q2 |
| ACaP1: | 10 | 1.21E+08 | 1.21E+08 | 0 | 0 | EIF3A exonic                 | NM_00375.         | .                     | ENST0000 CpG: 93 10q26.11     |
| ACaP1: | 10 | 1.21E+08 | 1.34E+08 | 0 | 0 | TEX36-AS exonic              | NM_00014.         | .                     | ENST0000 CpG: 54,C 10q26.13-c |
| ACaP1: | 10 | 1.34E+08 | 1.35E+08 | 0 | 0 | MIR202HC exonic              | NM_00101.         | .                     | ENST0000 CpG: 16,C 10q26.3    |
| ACaP1: | 10 | 1.35E+08 | 1.35E+08 | 0 | 0 | SCART1,S exonic              | NM_00077.         | .                     | ENST0000 CpG: 84,C 10q26.3    |
| ACaP1: | 10 | 1.35E+08 | 1.36E+08 | 0 | 0 | FRG2B,DL exonic              | NM_00108.         | .                     | ENST0000 CpG: 73,C 10q26.3    |
| ACaP1: | 10 | 1.36E+08 | 1.36E+08 | 0 | 0 | .                            | intergenic        | NM_00112 dist=21542.  | . 10q26.3                     |
| ACaP1: | 11 | 0        | 110000   | 0 | 0 | .                            | intergenic        | NONE,NR dist=NONE.    | . 11p15.5                     |
| ACaP1: | 11 | 110000   | 2960000  | 0 | 0 | MIR483,IR exonic             | NM_00007.         | .                     | ENST0000 CpG: 116,(11p15.5-p1 |

|        |    |          |          |   |   |                   |            |                        |   |                                |
|--------|----|----------|----------|---|---|-------------------|------------|------------------------|---|--------------------------------|
| ACaP1: | 11 | 20690000 | 31680000 | 0 | 0 | MIR8087, l exonic | NM_00051.  | .                      | . | ENST0000 CpG: 57, C 11p14.1-p1 |
| ACaP1: | 11 | 31680000 | 43910000 | 0 | 0 | CD59, TTC exonic  | NM_00028.  | .                      | . | ENST0000 CpG: 154, (11p11.2-p1 |
| ACaP1: | 11 | 48350000 | 48360000 | 0 | 0 | .                 | intergenic | NM_00100 dist=2518; r. | . | 11p11.2                        |
| ACaP1: | 11 | 48360000 | 56240000 | 0 | 0 | OR5T2, LO exonic  | NM_00100.  | .                      | . | ENST0000 CpG: 38, C 11q12.1-p1 |
| ACaP1: | 11 | 56240000 | 56340000 | 0 | 0 | OR5M11, C exonic  | NM_00100.  | .                      | . | ENST0000. 11q12.1              |
| ACaP1: | 11 | 56340000 | 56500000 | 0 | 0 | OR9G9, OF exonic  | NM_00100.  | .                      | . | ENST0000. 11q12.1              |
| ACaP1: | 11 | 56500000 | 56810000 | 0 | 0 | OR5AK4P, exonic   | NM_00100.  | .                      | . | ENST0000. 11q12.1              |
| ACaP1: | 11 | 57970000 | 60300000 | 0 | 0 | TCN1, OR1 exonic  | NM_00013.  | .                      | . | ENST0000 CpG: 36, C 11q12.1-q1 |
| ACaP1: | 11 | 62840000 | 63180000 | 0 | 0 | SLC22A9, t exonic | NM_00103.  | .                      | . | ENST0000. 11q12.3              |
| ACaP1: | 11 | 81600000 | 89170000 | 0 | 0 | RAB30-AS exonic   | NM_00037.  | .                      | . | ENST0000 CpG: 89, C 11q14.2-q1 |
| ACaP1: | 11 | 89170000 | 89830000 | 0 | 0 | TRIM77, TF exonic | NM_00110.  | .                      | . | ENST0000 CpG: 69, C 11q14.3    |
| ACaP1: | 11 | 89830000 | 1.11E+08 | 0 | 0 | JRKL, LINC exonic | NM_00001.  | .                      | . | ENST0000 CpG: 37, C 11q23.1-q2 |
| ACaP1: | 12 | 8290000  | 11340000 | 0 | 0 | A2M, KLRC exonic  | NM_00001.  | .                      | . | ENST0000 CpG: 35, C 12p13.2-p1 |
| ACaP1: | 12 | 14950000 | 30900000 | 0 | 0 | MGP, PDE, exonic  | NM_00041.  | .                      | . | ENST0000 CpG: 95, C 12p12.3-p1 |
| ACaP1: | 12 | 30900000 | 33540000 | 0 | 0 | DNM1L, FL exonic  | NM_00100.  | .                      | . | ENST0000 CpG: 86, C 12p11.21-p |
| ACaP1: | 12 | 33540000 | 38600000 | 0 | 0 | ALG10, SY exonic  | NM_03283.  | .                      | . | ENST0000 CpG: 44, C 12p11.1-q1 |
| ACaP1: | 12 | 38600000 | 39290000 | 0 | 0 | CPNE8, AL exonic  | NM_00101.  | .                      | . | ENST0000 CpG: 25 12q12         |
| ACaP1: | 12 | 39290000 | 48090000 | 0 | 0 | CPNE8, LI exonic  | NM_00100.  | .                      | . | ENST0000 CpG: 165, (12q13.11-c |
| ACaP1: | 12 | 55230000 | 55970000 | 0 | 0 | OR6C6, OF exonic  | NM_00100.  | .                      | . | ENST0000. 12q13.2              |
| ACaP1: | 12 | 58230000 | 80000000 | 0 | 0 | LRIG3, HEI exonic | NM_00023.  | .                      | . | ENST0000 CpG: 83, C 12q14.1-q1 |
| ACaP1: | 12 | 80000000 | 91540000 | 0 | 0 | KERA, LINC exonic | NM_00089.  | .                      | . | ENST0000 CpG: 34, C 12q21.32-c |
| ACaP1: | 12 | 91540000 | 1.08E+08 | 0 | 0 | KRT19P2, t exonic | NM_00027.  | .                      | . | ENST0000 CpG: 80, C 12q23.3-q2 |
| ACaP1: | 12 | 1.23E+08 | 1.24E+08 | 0 | 0 | VPS33A, M exonic  | NM_00100.  | .                      | . | ENST0000 CpG: 48, C 12q24.31   |
| ACaP1: | 12 | 1.24E+08 | 1.24E+08 | 0 | 0 | TMED2, DI exonic  | NM_00681.  | .                      | . | ENST0000 CpG: 80, C 12q24.31   |
| ACaP1: | 12 | 1.32E+08 | 1.34E+08 | 0 | 0 | NOC4L, MI exonic  | NM_00100.  | .                      | . | ENST0000 CpG: 24, C 12q24.33   |
| ACaP1: | 12 | 1.34E+08 | 1.34E+08 | 0 | 0 | ANHX exonic       | NM_00119.  | .                      | . | ENST0000 CpG: 79 12q24.33      |
| ACaP1: | 13 | 0        | 34410000 | 0 | 0 | RPL21P28 exonic   | NM_00005.  | .                      | . | ENST0000 CpG: 113, (13p13-p11  |
| ACaP1: | 13 | 34410000 | 36030000 | 0 | 0 | NBEA, LINC exonic | NM_00291.  | .                      | . | ENST0000. 13q13.2-q1           |
| ACaP1: | 13 | 36030000 | 41130000 | 0 | 0 | SPG20OS, exonic   | NM_00053.  | .                      | . | ENST0000 CpG: 30, C 13q14.11-c |
| ACaP1: | 13 | 42190000 | 42240000 | 0 | 0 | VWA8 intronic     | NM_01505.  | .                      | . | ENST0000. 13q14.11             |
| ACaP1: | 13 | 42240000 | 43530000 | 0 | 0 | EPSTI1, FA exonic | NM_00100.  | .                      | . | ENST0000 CpG: 105, (13q14.11   |
| ACaP1: | 13 | 43530000 | 52280000 | 0 | 0 | DNAJC15, exonic   | NM_00032.  | .                      | . | ENST0000 CpG: 44, C 13q14.3-q1 |
| ACaP1: | 13 | 53010000 | 70380000 | 0 | 0 | LECT1, DI exonic  | NM_00101.  | .                      | . | ENST0000 CpG: 216, (13q21.1-q2 |
| ACaP1: | 13 | 70380000 | 72040000 | 0 | 0 | LINC0034t exonic  | NM_00128.  | .                      | . | ENST0000 CpG: 42 13q21.33      |
| ACaP1: | 13 | 72040000 | 72430000 | 0 | 0 | DACH1 exonic      | NM_00439.  | .                      | . | ENST0000 CpG: 26 13q21.33      |



|        |    |          |          |   |   |           |            |           |              |   |           |            |            |
|--------|----|----------|----------|---|---|-----------|------------|-----------|--------------|---|-----------|------------|------------|
| ACaP1: | 13 | 72430000 | 98120000 | 0 | 0 | KLF12,MIF | exonic     | NM_00011. | .            | . | ENST0000  | CpG: 49,C  | 13q31.1-q2 |
| ACaP1: | 13 | 98120000 | 98600000 | 0 | 0 | RAP2A     | UTR3       | NM_02103  | NM_02103.    | . | ENST0000. |            | 13q32.1-q3 |
| ACaP1: | 13 | 98600000 | 1.02E+08 | 0 | 0 | RNF113B,  | l          | exonic    | NM_00028.    | . | ENST0000  | CpG: 70,C  | 13q32.2-q3 |
| ACaP1: | 13 | 1.02E+08 | 1.1E+08  | 0 | 0 | SLC10A2,  | (          | exonic    | NM_00012.    | . | ENST0000  | CpG: 32,C  | 13q33.1-q3 |
| ACaP1: | 13 | 1.1E+08  | 1.1E+08  | 0 | 0 | MYO16     | intronic   | NM_00119. | .            | . | ENST0000. |            | 13q33.3    |
| ACaP1: | 14 | 0        | 19110000 | 0 | 0 | .         | intergenic | NONE,NM   | dist=NONE.   | . | .         | .          | 14q11.2-p1 |
| ACaP1: | 14 | 19110000 | 20410000 | 0 | 0 | POTEG,OI  | exonic     | NM_00100. | .            | . | ENST0000  | CpG: 209,( | 14q11.2    |
| ACaP1: | 14 | 20410000 | 20440000 | 0 | 0 | .         | intergenic | NM_00100  | dist=5158;(. | . | .         | .          | 14q11.2    |
| ACaP1: | 14 | 20440000 | 20510000 | 0 | 0 | OR4K14,O  | exonic     | NM_00100. | .            | . | ENST0000. |            | 14q11.2    |
| ACaP1: | 14 | 20510000 | 20520000 | 0 | 0 | .         | intergenic | NM_00100  | dist=7083;(. | . | .         | .          | 14q11.2    |
| ACaP1: | 14 | 20520000 | 20530000 | 0 | 0 | OR4L1     | exonic     | NM_00100. | .            | . | ENST0000. |            | 14q11.2    |
| ACaP1: | 14 | 20530000 | 20580000 | 0 | 0 | .         | downstream | NM_00100. | .            | . | ENST0000. |            | 14q11.2    |
| ACaP1: | 14 | 20580000 | 20720000 | 0 | 0 | OR4N5,OF  | exonic     | NM_00100. | .            | . | ENST0000. |            | 14q11.2    |
| ACaP1: | 14 | 22300000 | 22340000 | 0 | 0 | .         | intergenic | NM_00100  | dist=16576.  | . | ENST0000. |            | 14q11.2    |
| ACaP1: | 14 | 22340000 | 22350000 | 0 | 0 | .         | intergenic | NM_00100  | dist=20576.  | . | .         | .          | 14q11.2    |
| ACaP1: | 14 | 22350000 | 23320000 | 0 | 0 | MMP14,SL  | exonic     | NM_00112. | .            | . | ENST0000  | CpG: 25,C  | 14q11.2    |
| ACaP1: | 14 | 26930000 | 33680000 | 0 | 0 | GPR33,DT  | exonic     | NM_00103. | .            | . | ENST0000  | CpG: 24,C  | 14q13.1-q1 |
| ACaP1: | 14 | 33680000 | 33690000 | 0 | 0 | NPAS3     | exonic     | NM_00116. | .            | . | ENST0000. |            | 14q13.1    |
| ACaP1: | 14 | 33690000 | 38200000 | 0 | 0 | PPP2R3C,  | exonic     | NM_00107. | .            | . | ENST0000  | CpG: 88,C  | 14q13.2-q2 |
| ACaP1: | 14 | 38200000 | 48150000 | 0 | 0 | LINC0063f | exonic     | NM_00100. | .            | . | ENST0000  | CpG: 108,( | 14q21.1-q2 |
| ACaP1: | 14 | 48150000 | 48220000 | 0 | 0 | .         | intergenic | NM_00111  | dist=5843;(. | . | .         | .          | 14q21.3    |
| ACaP1: | 14 | 48220000 | 50180000 | 0 | 0 | MGAT2,RF  | exonic     | NM_00100. | .            | . | ENST0000  | CpG: 167,( | 14q21.3    |
| ACaP1: | 14 | 50180000 | 50280000 | 0 | 0 | NEMF,KLF  | exonic     | NM_00471. | .            | . | ENST0000  | CpG: 121   | 14q21.3    |
| ACaP1: | 14 | 52520000 | 52800000 | 0 | 0 | PTGDR,P1  | exonic     | NM_00095. | .            | . | ENST0000  | CpG: 111,( | 14q22.1    |
| ACaP1: | 14 | 52800000 | 60390000 | 0 | 0 | MIR4308,F | exonic     | NM_00016. | .            | . | ENST0000  | CpG: 145,( | 14q23.1-q2 |
| ACaP1: | 14 | 60390000 | 60950000 | 0 | 0 | PCNXL4,L  | exonic     | NM_01602. | .            | . | ENST0000  | CpG: 85,C  | 14q23.1    |
| ACaP1: | 14 | 60950000 | 64010000 | 0 | 0 | HIF1A,SIX | exonic     | NM_00101. | .            | . | ENST0000  | CpG: 135,( | 14q23.2-q2 |
| ACaP1: | 14 | 64010000 | 64060000 | 0 | 0 | PPP2R5E   | UTR5       | NM_00128  | NM_00128.    | . | ENST0000  | CpG: 89    | 14q23.2    |
| ACaP1: | 14 | 64060000 | 64460000 | 0 | 0 | WDR89,Ml  | exonic     | NM_00100. | .            | . | ENST0000  | CpG: 29,C  | 14q23.2    |
| ACaP1: | 14 | 64460000 | 64550000 | 0 | 0 | MIR548AZ  | exonic     | NM_01518. | .            | . | ENST0000. |            | 14q23.2    |
| ACaP1: | 14 | 66020000 | 66490000 | 0 | 0 | FUT8      | exonic     | NM_00448. | .            | . | ENST0000. |            | 14q23.3    |
| ACaP1: | 14 | 66490000 | 66960000 | 0 | 0 | LINC0023f | ncRNA_ex   | NR_02433. | .            | . | ENST0000. |            | 14q23.3    |
| ACaP1: | 14 | 66960000 | 67830000 | 0 | 0 | FAM71D,C  | exonic     | NM_00102. | .            | . | ENST0000  | CpG: 97,C  | 14q23.3    |
| ACaP1: | 14 | 67830000 | 67900000 | 0 | 0 | EIF2S1,PL | exonic     | NM_00409. | .            | . | ENST0000  | CpG: 67    | 14q23.3    |
| ACaP1: | 14 | 74340000 | 74410000 | 0 | 0 | PTGR2,FA  | exonic     | NM_00114. | .            | . | ENST0000  | CpG: 59    | 14q24.3    |

|        |    |          |          |   |   |            |            |                    |   |   |           |            |            |
|--------|----|----------|----------|---|---|------------|------------|--------------------|---|---|-----------|------------|------------|
| ACaP1: | 14 | 80120000 | 81570000 | 0 | 0 | NRXN3,CE   | exonic     | NM_00036.          | . | . | ENST0000  | CpG: 25,C  | 14q31.1    |
| ACaP1: | 14 | 81570000 | 81670000 | 0 | 0 | GTF2A1,S   | exonic     | NM_00036.          | . | . | ENST0000. |            | 14q31.1    |
| ACaP1: | 14 | 81670000 | 81980000 | 0 | 0 | RP11-299L  | exonic     | NM_00124.          | . | . | ENST0000  | CpG: 112,( | 14q31.1    |
| ACaP1: | 14 | 81980000 | 85990000 | 0 | 0 | SEL1L,RP   | exonic     | NM_00124.          | . | . | ENST0000  | CpG: 52    | 14q31.1-q3 |
| ACaP1: | 14 | 85990000 | 89110000 | 0 | 0 | KCNK10,F   | exonic     | NM_00015.          | . | . | ENST0000  | CpG: 29,C  | 14q31.3    |
| ACaP1: | 14 | 89110000 | 89260000 | 0 | 0 | EML5       | exonic     | NM_18338.          | . | . | ENST0000  | CpG: 129   | 14q31.3    |
| ACaP1: | 14 | 89260000 | 89300000 | 0 | 0 | TTC8       | exonic     | NM_00128.          | . | . | ENST0000  | CpG: 41    | 14q31.3    |
| ACaP1: | 14 | 89300000 | 89600000 | 0 | 0 | TTC8       | exonic     | NM_00128.          | . | . | ENST0000  | CpG: 108   | 14q31.3    |
| ACaP1: | 14 | 1.05E+08 | 1.05E+08 | 0 | 0 | MIR3545,II | exonic     | NM_00100.          | . | . | ENST0000  | CpG: 42,C  | 14q32.33   |
| ACaP1: | 14 | 1.05E+08 | 1.05E+08 | 0 | 0 | ZBTB42     | UTR3       | NM_00113NM_00113.  | . | . | ENST0000. |            | 14q32.33   |
| ACaP1: | 14 | 1.05E+08 | 1.05E+08 | 0 | 0 | LINC0063f  | ncRNA_ex   | NR_02439.          | . | . | ENST0000  | CpG: 136   | 14q32.33   |
| ACaP1: | 14 | 1.05E+08 | 1.05E+08 | 0 | 0 | LINC0063f  | ncRNA_ex   | NR_02439.          | . | . | ENST0000  | CpG: 22,C  | 14q32.33   |
| ACaP1: | 14 | 1.05E+08 | 1.06E+08 | 0 | 0 | C14orf79,J | exonic     | NM_00111.          | . | . | ENST0000  | CpG: 166,( | 14q32.33   |
| ACaP1: | 14 | 1.06E+08 | 1.06E+08 | 0 | 0 | MTA1,TEX   | exonic     | NM_00110.          | . | . | ENST0000  | CpG: 94,C  | 14q32.33   |
| ACaP1: | 14 | 1.06E+08 | 1.06E+08 | 0 | 0 | C14orf80,C | exonic     | NM_00113.          | . | . | ENST0000  | CpG: 25,C  | 14q32.33   |
| ACaP1: | 14 | 1.06E+08 | 1.06E+08 | 0 | 0 | C14orf80,T | exonic     | NM_00113.          | . | . | ENST0000  | CpG: 23,C  | 14q32.33   |
| ACaP1: | 14 | 1.06E+08 | 1.06E+08 | 0 | 0 | MIR8071-2  | ncRNA_ex   | NR_04621.          | . | . | ENST0000  | CpG: 46,C  | 14q32.33   |
| ACaP1: | 15 | 0        | 20160000 | 0 | 0 | .          | intergenic | NONE,NR_dist=NONE. | . | . | ENST0000  | CpG: 170,( | 15p11.1-p1 |
| ACaP1: | 15 | 20160000 | 23890000 | 0 | 0 | GOLGA6L    | exonic     | NM_00100.          | . | . | ENST0000  | CpG: 69,C  | 15q11.1-q1 |
| ACaP1: | 15 | 23890000 | 24920000 | 0 | 0 | PWRN2,P1   | exonic     | NM_00248.          | . | . | ENST0000  | CpG: 32,C  | 15q11.2    |
| ACaP1: | 15 | 32900000 | 35150000 | 0 | 0 | MIR1233-1  | exonic     | NM_00102.          | . | . | ENST0000  | CpG: 71,C  | 15q13.3-q1 |
| ACaP1: | 15 | 35150000 | 40570000 | 0 | 0 | DPH6,MIR   | exonic     | NM_00100.          | . | . | ENST0000  | CpG: 109,( | 15q14-q15  |
| ACaP1: | 15 | 45850000 | 62460000 | 0 | 0 | UNC13C,L   | exonic     | NM_00010.          | . | . | ENST0000  | CpG: 180,( | 15q22.1-q2 |
| ACaP1: | 15 | 67490000 | 68470000 | 0 | 0 | SKOR1,M/   | exonic     | NM_00103.          | . | . | ENST0000  | CpG: 112,( | 15q22.33-c |
| ACaP1: | 15 | 70370000 | 71350000 | 0 | 0 | UACA,TH/   | exonic     | NM_00100.          | . | . | ENST0000  | CpG: 42,C  | 15q23      |
| ACaP1: | 15 | 71350000 | 73860000 | 0 | 0 | ADPGK-A    | exonic     | NM_00052.          | . | . | ENST0000  | CpG: 39,C  | 15q24.1-q2 |
| ACaP1: | 15 | 76110000 | 77370000 | 0 | 0 | ISL2,FBXC  | exonic     | NM_00012.          | . | . | ENST0000  | CpG: 94,C  | 15q24.2-q2 |
| ACaP1: | 15 | 82630000 | 83200000 | 0 | 0 | RPS17,GC   | exonic     | NM_00102.          | . | . | ENST0000  | CpG: 21,C  | 15q25.2    |
| ACaP1: | 15 | 93440000 | 98520000 | 0 | 0 | NR2F2,CH   | exonic     | NM_00104.          | . | . | ENST0000  | CpG: 145,( | 15q26.2-q2 |
| ACaP1: | 16 | 60000    | 190000   | 0 | 0 | MIR6859-1  | exonic     | NM_00101.          | . | . | ENST0000  | CpG: 33,C  | 16p13.3    |
| ACaP1: | 16 | 200000   | 580000   | 0 | 0 | TMEM8A,L   | exonic     | NM_00051.          | . | . | ENST0000  | CpG: 34,C  | 16p13.3    |
| ACaP1: | 16 | 580000   | 1590000  | 0 | 0 | HAGHL,LM   | exonic     | NM_00100.          | . | . | ENST0000  | CpG: 172,( | 16p13.3    |
| ACaP1: | 16 | 1800000  | 2290000  | 0 | 0 | ZNF598,H/  | exonic     | NM_00029.          | . | . | ENST0000  | CpG: 37,C  | 16p13.3    |
| ACaP1: | 16 | 21380000 | 21570000 | 0 | 0 | SLC7A5P2   | exonic     | NM_13046.          | . | . | ENST0000  | CpG: 26,C  | 16p12.2    |
| ACaP1: | 16 | 22360000 | 22630000 | 0 | 0 | RRN3P3,N   | exonic     | NM_00113.          | . | . | ENST0000  | CpG: 139,( | 16p12.2    |

|        |    |          |          |   |   |                   |                                 |   |   |                               |
|--------|----|----------|----------|---|---|-------------------|---------------------------------|---|---|-------------------------------|
| ACaP1: | 16 | 30190000 | 31110000 | 0 | 0 | ZNF668,L exonic   | NM_00029.                       | . | . | ENST0000 CpG: 62,C 16p11.2    |
| ACaP1: | 16 | 31110000 | 31190000 | 0 | 0 | PRSS8,KA exonic   | NM_00112.                       | . | . | ENST0000 CpG: 115,(16p11.2    |
| ACaP1: | 16 | 33810000 | 55620000 | 0 | 0 | FTO-IT1,N exonic  | NM_00029.                       | . | . | ENST0000 CpG: 28,C 16p11.2-p1 |
| ACaP1: | 16 | 88050000 | 89270000 | 0 | 0 | SNAI3-AS' exonic  | NM_00010.                       | . | . | ENST0000 CpG: 85,C 16q24.2-q2 |
| ACaP1: | 17 | 0        | 130000   | 0 | 0 | RPH3AL,L exonic   | NM_00119.                       | . | . | ENST0000 CpG: 40,C 17p13.3    |
| ACaP1: | 17 | 29480000 | 29710000 | 0 | 0 | NF1,EVI2A exonic  | NM_00026.                       | . | . | ENST0000 CpG: 29 17q11.2      |
| ACaP1: | 17 | 39200000 | 39390000 | 0 | 0 | KRTAP4-6 exonic   | NM_00112.                       | . | . | ENST0000. 17q21.2             |
| ACaP1: | 17 | 44120000 | 45210000 | 0 | 0 | KANSL1,M exonic   | NM_00100.                       | . | . | ENST0000 CpG: 140,(17q21.32-c |
| ACaP1: | 17 | 45210000 | 45230000 | 0 | 0 | CDC27 exonic      | NM_00111.                       | . | . | ENST0000. 17q21.32            |
| ACaP1: | 17 | 45230000 | 49260000 | 0 | 0 | MIR152,Sf exonic  | NM_00002.                       | . | . | ENST0000 CpG: 56,C 17q21.33-c |
| ACaP1: | 17 | 49260000 | 54940000 | 0 | 0 | ANKFN1,P exonic   | NM_00108.                       | . | . | ENST0000 CpG: 97,C 17q22-q21  |
| ACaP1: | 17 | 54940000 | 54960000 | 0 | 0 | DGKE exonic       | NM_00364.                       | . | . | ENST0000. 17q22               |
| ACaP1: | 17 | 54960000 | 58060000 | 0 | 0 | MKS1,MT\ exonic   | NM_00025.                       | . | . | ENST0000 CpG: 17,C 17q22-q23  |
| ACaP1: | 17 | 58060000 | 60370000 | 0 | 0 | USP32,TB exonic   | NM_00071.                       | . | . | ENST0000 CpG: 43,C 17q23.1-q2 |
| ACaP1: | 17 | 60370000 | 60440000 | 0 | 0 | .                 | intergenic NR_02748 dist=16984. | . | . | ENST0000. 17q23.2             |
| ACaP1: | 17 | 60440000 | 66990000 | 0 | 0 | PSMD12,F exonic   | NM_00004.                       | . | . | ENST0000 CpG: 198,(17q24.2-q2 |
| ACaP1: | 17 | 66990000 | 68130000 | 0 | 0 | MAP2K6,A exonic   | NM_00127.                       | . | . | ENST0000 CpG: 116 17q24.3-q2  |
| ACaP1: | 17 | 78920000 | 80060000 | 0 | 0 | ARHGDI A, exonic  | NM_00016.                       | . | . | ENST0000 CpG: 23,C 17q25.3    |
| ACaP1: | 18 | 0        | 40000    | 0 | 0 | .                 | intergenic NONE,NR_dist=NONE.   | . | . | ENST0000 CpG: 67 18p11.32     |
| ACaP1: | 18 | 40000    | 120000   | 0 | 0 | ROCK1P1, ncRNA_ex | NR_03377.                       | . | . | ENST0000 CpG: 51,C 18p11.32   |
| ACaP1: | 18 | 120000   | 11600000 | 0 | 0 | C18orf56,L exonic | NM_00100.                       | . | . | ENST0000 CpG: 79,C 18p11.23-p |
| ACaP1: | 18 | 18540000 | 19020000 | 0 | 0 | GREB1L,R exonic   | NM_00114.                       | . | . | ENST0000 CpG: 195,(18q11.2-q1 |
| ACaP1: | 18 | 21960000 | 30340000 | 0 | 0 | DSC1,WBI exonic   | NM_00037.                       | . | . | ENST0000 CpG: 66,C 18q12.1-q1 |
| ACaP1: | 18 | 30340000 | 32420000 | 0 | 0 | DTNA,AS\ exonic   | NM_00110.                       | . | . | ENST0000 CpG: 43,C 18q12.1    |
| ACaP1: | 18 | 48430000 | 50460000 | 0 | 0 | RP11-267C exonic  | NM_00116.                       | . | . | ENST0000 CpG: 107,(18q21.2    |
| ACaP1: | 18 | 50460000 | 51680000 | 0 | 0 | DCC,MBD' exonic   | NM_00521.                       | . | . | ENST0000. 18q21.2             |
| ACaP1: | 18 | 51680000 | 54630000 | 0 | 0 | TCF4,MIR' exonic  | NM_00108.                       | . | . | ENST0000 CpG: 59,C 18q21.2-q2 |
| ACaP1: | 18 | 54630000 | 54680000 | 0 | 0 | WDR7 intronic     | NM_01528.                       | . | . | ENST0000. 18q21.31            |
| ACaP1: | 18 | 56820000 | 70930000 | 0 | 0 | RP11-909E exonic  | NM_00063.                       | . | . | ENST0000 CpG: 120,(18q21.33-c |
| ACaP1: | 18 | 70930000 | 71740000 | 0 | 0 | LOC10050 ncRNA_ex | NR_03413.                       | . | . | ENST0000. 18q22.3             |
| ACaP1: | 18 | 71740000 | 78077248 | 0 | 0 | TSHZ1,AT exonic   | NM_00102.                       | . | . | ENST0000 CpG: 151,(18q22.3-q2 |
| ACaP1: | 19 | 0        | 60000    | 0 | 0 | .                 | downstream NR_03326.            | . | . | . 19p13.3                     |
| ACaP1: | 19 | 60000    | 210000   | 0 | 0 | FAM138A, exonic   | NM_00100.                       | . | . | ENST0000 CpG: 117 19p13.3     |
| ACaP1: | 19 | 210000   | 360000   | 0 | 0 | MIER2,PP, exonic  | NM_00371.                       | . | . | ENST0000 CpG: 70,C 19p13.3    |
| ACaP1: | 19 | 360000   | 2360000  | 0 | 0 | DAZAP1,R exonic   | NM_00015.                       | . | . | ENST0000 CpG: 18,C 19p13.3    |

|        |    |          |          |   |   |                      |                                |   |   |                               |
|--------|----|----------|----------|---|---|----------------------|--------------------------------|---|---|-------------------------------|
| ACaP1: | 19 | 2360000  | 6000000  | 0 | 0 | CREB3L3, exonic      | NM_00014.                      | . | . | ENST0000 CpG: 40,C 19p13.3    |
| ACaP1: | 19 | 6000000  | 6210000  | 0 | 0 | ACSBG2, F exonic     | NM_00063.                      | . | . | ENST0000 CpG: 23,C 19p13.3    |
| ACaP1: | 19 | 18330000 | 22610000 | 0 | 0 | JUND, KIAA exonic    | NM_00009.                      | . | . | ENST0000 CpG: 191,(19p12-p13  |
| ACaP1: | 19 | 22610000 | 22830000 | 0 | 0 | LOC10192 ncRNA_ex    | NR_03389.                      | . | . | ENST0000 CpG: 82,C 19p12      |
| ACaP1: | 19 | 22830000 | 23550000 | 0 | 0 | ZNF730, Z1 exonic    | NM_00108.                      | . | . | ENST0000 CpG: 32,C 19p12      |
| ACaP1: | 20 | 1540000  | 1560000  | 0 | 0 | SIRPB1 exonic        | NM_00108.                      | . | . | ENST0000. 20p13               |
| ACaP1: | 20 | 1560000  | 1580000  | 0 | 0 | SIRPB1 exonic        | NM_00113.                      | . | . | ENST0000. 20p13               |
| ACaP1: | 20 | 5520000  | 17620000 | 0 | 0 | SNRPB2, S exonic     | NM_00021.                      | . | . | ENST0000 CpG: 43,C 20p12.3-p1 |
| ACaP1: | 20 | 17670000 | 23410000 | 0 | 0 | SLC24A3, f exonic    | NM_00036.                      | . | . | ENST0000 CpG: 61,C 20p12.1-p1 |
| ACaP1: | 20 | 44160000 | 44360000 | 0 | 0 | WFDC8, S1 exonic     | NM_00119.                      | . | . | ENST0000. 20q13.12            |
| ACaP1: | 20 | 44360000 | 44630000 | 0 | 0 | NEURL2, V exonic     | NM_00030.                      | . | . | ENST0000 CpG: 46,C 20q13.12   |
| ACaP1: | 20 | 60870000 | 62210000 | 0 | 0 | PPDPF, M1 exonic     | NM_00074.                      | . | . | ENST0000 CpG: 54,C 20q13.33   |
| ACaP1: | 20 | 62210000 | 62220000 | 0 | 0 | GMEB2 UTR3           | NM_01238 NM_01238.             | . | . | ENST0000. 20q13.33            |
| ACaP1: | 20 | 62220000 | 62430000 | 0 | 0 | RTEL1-TN exonic      | NM_00108.                      | . | . | ENST0000 CpG: 17,C 20q13.33   |
| ACaP1: | 21 | 0        | 9750000  | 0 | 0 | .                    | intergenic NONE, NR_dist=NONE. | . | . | ENST0000 CpG: 31,C 21p13-p12  |
| ACaP1: | 21 | 9750000  | 9830000  | 0 | 0 | MIR3648, l1 ncRNA_ex | NR_03742.                      | . | . | ENST0000 CpG: 120 21p11.2     |
| ACaP1: | 21 | 9830000  | 14420000 | 0 | 0 | TPTE, BAG exonic     | NM_00118.                      | . | . | ENST0000 CpG: 24,C 21p11.1-q1 |
| ACaP1: | 21 | 14420000 | 15450000 | 0 | 0 | ANKRD301 exonic      | NM_17498.                      | . | . | ENST0000 CpG: 92,C 21q11.2    |
| ACaP1: | 21 | 15450000 | 27140000 | 0 | 0 | NRIP1, CH1 exonic    | NM_00100.                      | . | . | ENST0000 CpG: 138,(21q11.2-q2 |
| ACaP1: | 21 | 27140000 | 31670000 | 0 | 0 | GRIK1-AS: exonic     | NM_00048.                      | . | . | ENST0000 CpG: 46,C 21q21.3-q2 |
| ACaP1: | 21 | 34000000 | 34150000 | 0 | 0 | C21orf49, F exonic   | NM_00116.                      | . | . | ENST0000 CpG: 100,(21q22.11   |
| ACaP1: | 21 | 45700000 | 45760000 | 0 | 0 | PFKL, C21 exonic     | NM_00038.                      | . | . | ENST0000 CpG: 55,C 21q22.3    |
| ACaP1: | 21 | 45760000 | 45770000 | 0 | 0 | .                    | upstream NM_00127.             | . | . | ENST0000. 21q22.3             |
| ACaP1: | 21 | 45770000 | 45870000 | 0 | 0 | TRPM2-A5 exonic      | NM_00330.                      | . | . | ENST0000 CpG: 20,C 21q22.3    |
| ACaP1: | 21 | 45870000 | 45910000 | 0 | 0 | LRRC3, LR exonic     | NM_03089.                      | . | . | ENST0000 CpG: 28,C 21q22.3    |
| ACaP1: | 21 | 45910000 | 45930000 | 0 | 0 | TSPEAR-A exonic      | NM_00127.                      | . | . | ENST0000 CpG: 19 21q22.3      |
| ACaP1: | 21 | 45930000 | 47590000 | 0 | 0 | COL18A1- exonic      | NM_00021.                      | . | . | ENST0000 CpG: 142,(21q22.3    |
| ACaP1: | 21 | 47770000 | 47790000 | 0 | 0 | PCNT exonic          | NM_00603.                      | . | . | ENST0000. 21q22.3             |
| ACaP1: | 21 | 47790000 | 47820000 | 0 | 0 | PCNT exonic          | NM_00603.                      | . | . | ENST0000 CpG: 34,C 21q22.3    |
| ACaP1: | 22 | 0        | 16090000 | 0 | 0 | .                    | intergenic NONE, NR_dist=NONE. | . | . | ENST0000. 22p12-q11           |
| ACaP1: | 22 | 16090000 | 17160000 | 0 | 0 | OR11H1, B exonic     | NM_00100.                      | . | . | ENST0000 CpG: 37,C 22q11.1    |
| ACaP1: | 22 | 18650000 | 18870000 | 0 | 0 | GGT3P, U5 exonic     | NM_01741.                      | . | . | ENST0000 CpG: 130,(22q11.21   |
| ACaP1: | 22 | 19500000 | 20140000 | 0 | 0 | TBX1, MIR exonic     | NM_00040.                      | . | . | ENST0000 CpG: 73,C 22q11.21   |
| ACaP1: | 22 | 20140000 | 20190000 | 0 | 0 | LOC28486 ncRNA_ex    | NR_03846.                      | . | . | ENST0000 CpG: 21 22q11.21     |
| ACaP1: | 22 | 20190000 | 20740000 | 0 | 0 | LOC72944 exonic      | NM_00124.                      | . | . | ENST0000 CpG: 140,(22q11.21   |

|         |    |          |          |   |   |                   |                                  |   |   |                               |
|---------|----|----------|----------|---|---|-------------------|----------------------------------|---|---|-------------------------------|
| ACaP1:  | 22 | 20740000 | 20790000 | 0 | 0 | SCARF2,Z exonic   | NM_00125.                        | . | . | ENST0000 CpG: 248,(22q11.21   |
| ACaP1:  | 22 | 21470000 | 21910000 | 0 | 0 | POM121L, exonic   | NM_00112.                        | . | . | ENST0000 CpG: 170,(22q11.21   |
| ACaP1:  | 22 | 21910000 | 21970000 | 0 | 0 | UBE2L3 exonic     | NM_00125.                        | . | . | ENST0000 CpG: 85 22q11.21     |
| ACaP1:  | 22 | 22900000 | 22990000 | 0 | 0 | GGTLC2,F exonic   | NM_00128.                        | . | . | ENST0000 CpG: 28,C 22q11.22   |
| ACaP1:  | 22 | 22990000 | 23040000 | 0 | 0 | GGTLC2 exonic     | NM_00128.                        | . | . | ENST0000. 22q11.22            |
| ACaP1:  | 22 | 45210000 | 50600000 | 0 | 0 | C22orf34,v exonic | NM_00100.                        | . | . | ENST0000 CpG: 84,C 22q13.31-c |
| ACaP1:  | 22 | 50600000 | 50620000 | 0 | 0 | PANX2,MC exonic   | NM_00116.                        | . | . | ENST0000 CpG: 46,C 22q13.33   |
| ACaP1:  | 22 | 50620000 | 50630000 | 0 | 0 | TRABD UTR5        | NM_02520 NM_02520.               | . | . | ENST0000 CpG: 25,C 22q13.33   |
| ACaP1:  | 22 | 50630000 | 51170000 | 0 | 0 | MAPK12,P exonic   | NM_00048.                        | . | . | ENST0000 CpG: 30,C 22q13.33   |
| ACaP1:X |    | 20200000 | 46960000 | 0 | 0 | LOC39245 exonic   | NM_00010.                        | . | . | ENST0000 CpG: 154,(Xp21.1-Xp  |
| ACaP1:X |    | 71680000 | 73050000 | 0 | 0 | LINC0068, exonic  | NM_00101.                        | . | . | ENST0000 CpG: 34,C Xq13.1-Xq  |
| ACaP1:X |    | 73050000 | 74370000 | 0 | 0 | RLIM,SLC exonic   | NM_00100.                        | . | . | ENST0000 CpG: 29,C Xq13.3-Xq  |
| ACaP1:X |    | 74370000 | 76910000 | 0 | 0 | ZDHHC15, exonic   | NM_00048.                        | . | . | ENST0000 CpG: 60,C Xq21.1-Xq  |
| ACaP1:X |    | 80060000 | 1.48E+08 | 0 | 0 | IL13RA2,P exonic  | NM_00006.                        | . | . | ENST0000 CpG: 102,(Xq24-Xq27  |
| ACaP1:X |    | 1.48E+08 | 1.55E+08 | 0 | 0 | ZFP92,FAI exonic  | NM_00003.                        | . | . | ENST0000 CpG: 69,C Xq28       |
| ACaP1:X |    | 1.55E+08 | 1.55E+08 | 0 | 0 | .                 | intergenic NM_00218 dist=19518.  | . | . | Xq28                          |
| ACaP1:  | 1  | 0        | 10000    | 0 | 0 | .                 | intergenic NONE,NR_dist=NONE.    | . | . | 1p36.33                       |
| ACaP1:  | 1  | 10000    | 34680000 | 0 | 0 | CAMK2N1 exonic    | NM_00008.                        | . | . | ENST0000 CpG: 161,(1p35.1-p36 |
| ACaP1:  | 1  | 34680000 | 34690000 | 0 | 0 | C1orf94 exonic    | NM_00113.                        | . | . | ENST0000. 1p34.3              |
| ACaP1:  | 1  | 34690000 | 47260000 | 0 | 0 | C1orf122,C exonic | NM_00031.                        | . | . | ENST0000 CpG: 93,C 1p34.3-p34 |
| ACaP1:  | 1  | 47260000 | 47660000 | 0 | 0 | CYP4A22,t exonic  | NM_00077.                        | . | . | ENST0000 CpG: 40 1p33         |
| ACaP1:  | 1  | 47660000 | 86190000 | 0 | 0 | ASB17,GL exonic   | NM_00001.                        | . | . | ENST0000 CpG: 21,C 1p32.1-p31 |
| ACaP1:  | 1  | 86190000 | 86530000 | 0 | 0 | COL24A1 exonic    | NM_15289.                        | . | . | ENST0000. 1p22.3              |
| ACaP1:  | 1  | 86530000 | 86550000 | 0 | 0 | COL24A1 intronic  | NM_15289.                        | . | . | ENST0000. 1p22.3              |
| ACaP1:  | 1  | 86550000 | 87370000 | 0 | 0 | SEP15,CO exonic   | NM_00100.                        | . | . | ENST0000 CpG: 106,(1p22.3     |
| ACaP1:  | 1  | 87370000 | 87390000 | 0 | 0 | SEP15,HS exonic   | NM_00113.                        | . | . | ENST0000 CpG: 101 1p22.3      |
| ACaP1:  | 2  | 89080000 | 96270000 | 0 | 0 | TRIM43,AI exonic  | NM_00101.                        | . | . | ENST0000 CpG: 55,C 2q11.1-p11 |
| ACaP1:  | 2  | 96270000 | 96280000 | 0 | 0 | .                 | intergenic NM_13880 dist=4531;t. | . | . | 2q11.1                        |
| ACaP1:  | 2  | 1.14E+08 | 1.28E+08 | 0 | 0 | CLASP1,II exonic  | NM_00012.                        | . | . | ENST0000 CpG: 54,C 2q14.2-q13 |
| ACaP1:  | 3  | 1.43E+08 | 1.58E+08 | 0 | 0 | SUCNR1,F exonic   | NM_00009.                        | . | . | ENST0000 CpG: 303,(3q25.2-q25 |
| ACaP1:  | 3  | 1.58E+08 | 1.58E+08 | 0 | 0 | RSRC1 intronic    | NM_00127.                        | . | . | ENST0000. 3q25.32             |
| ACaP1:  | 3  | 1.58E+08 | 1.98E+08 | 0 | 0 | FLJ46066, exonic  | NM_00005.                        | . | . | ENST0000 CpG: 25,C 3q29-q27.1 |
| ACaP1:  | 3  | 1.98E+08 | 1.98E+08 | 0 | 0 | .                 | intergenic NM_00114 dist=52272.  | . | . | 3q29                          |
| ACaP1:  | 4  | 3240000  | 3320000  | 0 | 0 | HTT,MSA exonic    | NM_00104.                        | . | . | ENST0000 CpG: 20,C 4p16.3     |
| ACaP1:  | 4  | 3320000  | 3480000  | 0 | 0 | DOK7,HGf exonic   | NM_00116.                        | . | . | ENST0000 CpG: 22,C 4p16.3     |

|        |    |          |          |   |   |                   |            |                      |   |                               |
|--------|----|----------|----------|---|---|-------------------|------------|----------------------|---|-------------------------------|
| ACaP1: | 4  | 1.91E+08 | 1.91E+08 | 0 | 0 | DUX4L2,D exonic   | NM_00112.  | .                    | . | ENST0000 CpG: 2005 4q35.2     |
| ACaP1: | 4  | 1.91E+08 | 1.91E+08 | 0 | 0 | .                 | intergenic | NM_03317 dist=6558;1 | . | . 4q35.2                      |
| ACaP1: | 5  | 520000   | 660000   | 0 | 0 | SLC9A3,M exonic   | NM_00128.  | .                    | . | ENST0000 CpG: 87,C 5p15.33    |
| ACaP1: | 5  | 660000   | 1040000  | 0 | 0 | TPPP,LOC exonic   | NM_00100.  | .                    | . | ENST0000 CpG: 23,C 5p15.33    |
| ACaP1: | 5  | 1040000  | 1050000  | 0 | 0 | .                 | downstream | NM_00659.            | . | . 5p15.33                     |
| ACaP1: | 5  | 1120000  | 1150000  | 0 | 0 | .                 | intergenic | NM_00659 dist=7828;1 | . | . 5p15.33                     |
| ACaP1: | 5  | 1150000  | 1430000  | 0 | 0 | CLPTM1L, exonic   | NM_00100.  | .                    | . | ENST0000 CpG: 17,C 5p15.33    |
| ACaP1: | 5  | 6730000  | 6750000  | 0 | 0 | PAPD7 exonic      | NM_00117.  | .                    | . | ENST0000 CpG: 21 5p15.31      |
| ACaP1: | 5  | 19470000 | 31330000 | 0 | 0 | LINC01021 exonic  | NM_00116.  | .                    | . | ENST0000 CpG: 93,C 5p13.3-p14 |
| ACaP1: | 5  | 1.02E+08 | 1.02E+08 | 0 | 0 | SLCO6A1 exonic    | NM_00128.  | .                    | . | ENST0000. 5q21.1              |
| ACaP1: | 5  | 1.76E+08 | 1.76E+08 | 0 | 0 | LOC10050 exonic   | NM_00126.  | .                    | . | ENST0000. 5q35.2              |
| ACaP1: | 6  | 1.31E+08 | 1.31E+08 | 0 | 0 | AKAP7 exonic      | NM_01637.  | .                    | . | ENST0000 CpG: 71 6q23.2       |
| ACaP1: | 7  | 1.16E+08 | 1.16E+08 | 0 | 0 | TFEC exonic       | NM_00101.  | .                    | . | ENST0000. 7q31.2              |
| ACaP1: | 8  | 53470000 | 53480000 | 0 | 0 | FAM150A exonic    | NM_20741.  | .                    | . | ENST0000 CpG: 119 8q11.23     |
| ACaP1: | 8  | 1.04E+08 | 1.05E+08 | 0 | 0 | RIMS2,DC exonic   | NM_00110.  | .                    | . | ENST0000 CpG: 242 8q22.3      |
| ACaP1: | 8  | 1.19E+08 | 1.42E+08 | 0 | 0 | CASC8,RF exonic   | NM_00012.  | .                    | . | ENST0000 CpG: 92,C 8q24.12-q2 |
| ACaP1: | 8  | 1.42E+08 | 1.46E+08 | 0 | 0 | TIGD5,ZNF exonic  | NM_00044.  | .                    | . | ENST0000 CpG: 209,(8q24.3     |
| ACaP1: | 8  | 1.46E+08 | 1.46E+08 | 0 | 0 | ZNF252P, exonic   | NM_02308.  | .                    | . | ENST0000 CpG: 94,C 8q24.3     |
| ACaP1: | 9  | 16720000 | 16740000 | 0 | 0 | BNC2 exonic       | NM_01763.  | .                    | . | ENST0000 CpG: 46 9p22.2       |
| ACaP1: | 9  | 38520000 | 38620000 | 0 | 0 | ANKRD18, exonic   | NM_14719.  | .                    | . | ENST0000 CpG: 228,(9p13.1     |
| ACaP1: | 9  | 38620000 | 39070000 | 0 | 0 | ANKRD18, exonic   | NM_14719.  | .                    | . | ENST0000 CpG: 228 9p13.1      |
| ACaP1: | 9  | 39070000 | 39380000 | 0 | 0 | SPATA31A exonic   | NM_00104.  | .                    | . | ENST0000 CpG: 43,C 9p13.1     |
| ACaP1: | 9  | 1.14E+08 | 1.14E+08 | 0 | 0 | KIAA0368 exonic   | NM_00108.  | .                    | . | ENST0000 CpG: 183 9q31.3      |
| ACaP1: | 10 | 1.3E+08  | 1.3E+08  | 0 | 0 | FOXI2,PTF exonic  | NM_15231.  | .                    | . | ENST0000 CpG: 238,(10q26.2    |
| ACaP1: | 10 | 1.35E+08 | 1.35E+08 | 0 | 0 | GPR123,L exonic   | NM_00108.  | .                    | . | ENST0000 CpG: 38,C 10q26.3    |
| ACaP1: | 10 | 1.35E+08 | 1.36E+08 | 0 | 0 | DUX4L6,D exonic   | NM_00112.  | .                    | . | ENST0000 CpG: 1534 10q26.3    |
| ACaP1: | 10 | 1.36E+08 | 1.36E+08 | 0 | 0 | .                 | intergenic | NM_00112 dist=21542. | . | . 10q26.3                     |
| ACaP1: | 11 | 82530000 | 1.35E+08 | 0 | 0 | THYN1,OF exonic   | NM_00001.  | .                    | . | ENST0000 CpG: 119,(11q23.3-q2 |
| ACaP1: | 12 | 0        | 60000    | 0 | 0 | .                 | intergenic | NONE,NR_dist=NONE.   | . | . 12p13.33                    |
| ACaP1: | 12 | 60000    | 100000   | 0 | 0 | LOC10028 ncRNA_ex | NR_02826.  | .                    | . | ENST0000 CpG: 112 12p13.33    |
| ACaP1: | 12 | 8930000  | 18430000 | 0 | 0 | ART4,TAS exonic   | NM_00001.  | .                    | . | ENST0000 CpG: 19,C 12p13.1-p1 |
| ACaP1: | 12 | 18430000 | 18480000 | 0 | 0 | PIK3C2G exonic    | NM_00128.  | .                    | . | ENST0000. 12p12.3             |
| ACaP1: | 12 | 18480000 | 18490000 | 0 | 0 | PIK3C2G intronic  | NM_00128.  | .                    | . | ENST0000. 12p12.3             |
| ACaP1: | 12 | 18490000 | 20730000 | 0 | 0 | AEBP2,RP exonic   | NM_00092.  | .                    | . | ENST0000 CpG: 97,C 12p12.2-p1 |
| ACaP1: | 12 | 20730000 | 20760000 | 0 | 0 | PDE3A intronic    | NM_00092.  | .                    | . | ENST0000. 12p12.2             |

|        |    |          |          |   |   |                     |                                  |   |                     |             |
|--------|----|----------|----------|---|---|---------------------|----------------------------------|---|---------------------|-------------|
| ACaP1: | 12 | 20760000 | 21540000 | 0 | 0 | IAPP,SLC6A11 exonic | NM_00041.                        | . | ENST0000.           | 12p12.1-p1  |
| ACaP1: | 12 | 21540000 | 21590000 | 0 | 0 | SLCO1A2 UTR5        | NM_13443NM_13443.                | . | ENST0000.           | 12p12.1     |
| ACaP1: | 12 | 21590000 | 22840000 | 0 | 0 | KCNJ8,C2 exonic     | NM_00103.                        | . | ENST0000 CpG: 21,C  | 12p12.1     |
| ACaP1: | 12 | 22840000 | 23680000 | 0 | 0 | ETNK1 UTR3          | NM_01863NM_01863.                | . | ENST0000.           | 12p12.1     |
| ACaP1: | 12 | 23680000 | 25360000 | 0 | 0 | BCAT1,KR exonic     | NM_00100.                        | . | ENST0000 CpG: 98,C  | 12p12.1     |
| ACaP1: | 12 | 25360000 | 25800000 | 0 | 0 | IFLTD1,KF exonic    | NM_00114.                        | . | ENST0000 CpG: 69,C  | 12p12.1     |
| ACaP1: | 12 | 25800000 | 33540000 | 0 | 0 | MRPS35,F exonic     | NM_00100.                        | . | ENST0000 CpG: 90,C  | 12p11.21-p1 |
| ACaP1: | 13 | 67790000 | 80130000 | 0 | 0 | LINC00331 exonic    | NM_00011.                        | . | ENST0000 CpG: 177,( | 13q21.32-c  |
| ACaP1: | 13 | 1.11E+08 | 1.12E+08 | 0 | 0 | LINC00346 exonic    | NM_00111.                        | . | ENST0000 CpG: 206,( | 13q34       |
| ACaP1: | 13 | 1.12E+08 | 1.13E+08 | 0 | 0 | SOX1,TEX exonic     | NM_00111.                        | . | ENST0000 CpG: 201,( | 13q34       |
| ACaP1: | 13 | 1.13E+08 | 1.14E+08 | 0 | 0 | TUBGCP3 exonic      | NM_00128.                        | . | ENST0000 CpG: 38,C  | 13q34       |
| ACaP1: | 13 | 1.14E+08 | 1.14E+08 | 0 | 0 | .                   | intergenic NM_03218 dist=38518.  | . | ENST0000 CpG: 79    | 13q34       |
| ACaP1: | 13 | 1.14E+08 | 1.14E+08 | 0 | 0 | MCF2L,MC exonic     | NM_00111.                        | . | ENST0000 CpG: 26,C  | 13q34       |
| ACaP1: | 13 | 1.14E+08 | 1.15E+08 | 0 | 0 | CUL4A,LIN exonic    | NM_00013.                        | . | ENST0000 CpG: 137,( | 13q34       |
| ACaP1: | 13 | 1.15E+08 | 1.15E+08 | 0 | 0 | UPF3A,CH exonic     | NM_00116.                        | . | ENST0000 CpG: 100   | 13q34       |
| ACaP1: | 14 | 0        | 19110000 | 0 | 0 | .                   | intergenic NONE,NM dist=NONE.    | . | .                   | 14p11.2-p1  |
| ACaP1: | 14 | 19110000 | 20410000 | 0 | 0 | DUXAP10, exonic     | NM_00100.                        | . | ENST0000 CpG: 42,C  | 14q11.2     |
| ACaP1: | 14 | 20410000 | 20470000 | 0 | 0 | OR4K15 exonic       | NM_00100.                        | . | ENST0000.           | 14q11.2     |
| ACaP1: | 14 | 1.04E+08 | 1.05E+08 | 0 | 0 | ASPG,MIR exonic     | NM_00108.                        | . | ENST0000 CpG: 23,C  | 14q32.33    |
| ACaP1: | 14 | 1.06E+08 | 1.06E+08 | 0 | 0 | .                   | intergenic NM_02526 dist=53461.  | . | ENST0000 CpG: 15,C  | 14q32.33    |
| ACaP1: | 14 | 1.06E+08 | 1.06E+08 | 0 | 0 | MIR8071-1 ncRNA_ex  | NR_10703.                        | . | ENST0000.           | 14q32.33    |
| ACaP1: | 14 | 1.06E+08 | 1.06E+08 | 0 | 0 | MIR8071-1 ncRNA_ex  | NR_02680.                        | . | ENST0000 CpG: 19,C  | 14q32.33    |
| ACaP1: | 15 | 20160000 | 22570000 | 0 | 0 | OR4M2,Of exonic     | NM_00100.                        | . | ENST0000 CpG: 141,( | 15q11.1-q1  |
| ACaP1: | 15 | 25350000 | 25500000 | 0 | 0 | PWAR4,Sl ncRNA_ex   | NR_00129.                        | . | ENST0000.           | 15q11.2     |
| ACaP1: | 16 | 32060000 | 33790000 | 0 | 0 | TP53TG3L exonic     | NM_00109.                        | . | ENST0000 CpG: 107,( | 16p11.2     |
| ACaP1: | 16 | 33790000 | 34250000 | 0 | 0 | LINC00271 ncRNA_ex  | NR_03836.                        | . | ENST0000 CpG: 142,( | 16p11.2     |
| ACaP1: | 16 | 34250000 | 34480000 | 0 | 0 | UBE2MP1 ncRNA_ex    | NR_00283.                        | . | ENST0000 CpG: 93,C  | 16p11.2     |
| ACaP1: | 17 | 34440000 | 34490000 | 0 | 0 | .                   | intergenic NM_00298 dist=6986;1. | . | ENST0000.           | 17q12       |
| ACaP1: | 17 | 34490000 | 34810000 | 0 | 0 | TBC1D3G, exonic     | NM_00100.                        | . | ENST0000 CpG: 103,( | 17q12       |
| ACaP1: | 18 | 0        | 40000    | 0 | 0 | .                   | intergenic NONE,NR dist=NONE.    | . | ENST0000 CpG: 67    | 18p11.32    |
| ACaP1: | 18 | 40000    | 510000   | 0 | 0 | MIR8078,C exonic    | NM_00103.                        | . | ENST0000 CpG: 21,C  | 18p11.32    |
| ACaP1: | 18 | 510000   | 580000   | 0 | 0 | .                   | upstream NM_00406.               | . | ENST0000 CpG: 99    | 18p11.32    |
| ACaP1: | 18 | 580000   | 3890000  | 0 | 0 | DLGAP1-A exonic     | NM_00100.                        | . | ENST0000 CpG: 330,( | 18p11.31-p1 |
| ACaP1: | 18 | 29970000 | 78077248 | 0 | 0 | CCDC102L exonic     | NM_00014.                        | . | ENST0000 CpG: 149,( | 18q12.3-q2  |
| ACaP1: | 19 | 100000   | 210000   | 0 | 0 | LINC01002 exonic    | NM_00100.                        | . | ENST0000.           | 19p13.3     |

|         |    |          |          |   |   |           |            |           |             |   |           |                      |
|---------|----|----------|----------|---|---|-----------|------------|-----------|-------------|---|-----------|----------------------|
| ACaP1:  | 19 | 59100000 | 59120000 | 0 | 0 | .         | intergenic | NR_02605  | dist=4238;  | . | ENST0000. | 19q13.43             |
| ACaP1:  | 19 | 59120000 | 59128983 | 0 | 0 | .         | intergenic | NR_02605  | dist=24238. | . | .         | 19q13.43             |
| ACaP1:  | 20 | 1350000  | 1360000  | 0 | 0 | SDCBP2-A  | exonic     | NM_00080. | .           | . | ENST0000. | 20p13                |
| ACaP1:  | 20 | 49300000 | 49310000 | 0 | 0 | .         | intergenic | NM_08082  | dist=46574. | . | ENST0000. | 20q13.13             |
| ACaP1:  | 20 | 50090000 | 59900000 | 0 | 0 | MTRNR2L   | exonic     | NM_00011. | .           | . | ENST0000  | CpG: 29,C 20q13.2-q1 |
| ACaP1:  | 20 | 59900000 | 59910000 | 0 | 0 | CDH4      | intronic   | NM_00179. | .           | . | ENST0000. | 20q13.33             |
| ACaP1:  | 20 | 59910000 | 60070000 | 0 | 0 | CDH4      | intronic   | NM_00179. | .           | . | ENST0000  | CpG: 16 20q13.33     |
| ACaP1:  | 20 | 60070000 | 61850000 | 0 | 0 | LOC10192  | exonic     | NM_00102. | .           | . | ENST0000  | CpG: 44,C 20q13.33   |
| ACaP1:  | 20 | 61850000 | 61860000 | 0 | 0 | .         | intergenic | NM_01779  | dist=2462;  | . | .         | 20q13.33             |
| ACaP1:  | 20 | 61860000 | 62200000 | 0 | 0 | HELZ2,PTI | exonic     | NM_00074. | .           | . | ENST0000  | CpG: 134,( 20q13.33  |
| ACaP1:  | 20 | 62200000 | 62930000 | 0 | 0 | DNAJC5,T  | exonic     | NM_00091. | .           | . | ENST0000  | CpG: 43,C 20q13.33   |
| ACaP1:  | 20 | 62930000 | 63025520 | 0 | 0 | LINC0026f | ncRNA_ex   | NR_04041. | .           | . | ENST0000  | CpG: 78,C 20q13.33   |
| ACaP1:  | 21 | 42840000 | 43170000 | 0 | 0 | LINC0011z | exonic     | NM_00113. | .           | . | ENST0000  | CpG: 152,( 21q22.3   |
| ACaP1:  | 22 | 0        | 16090000 | 0 | 0 | .         | intergenic | NONE,NR_  | dist=NONE.  | . | ENST0000. | 22p12-q11            |
| ACaP1:  | 22 | 16090000 | 16920000 | 0 | 0 | POTEH-Af  | exonic     | NM_00100. | .           | . | ENST0000  | CpG: 37,C 22q11.1    |
| ACaP1:  | 22 | 16920000 | 16950000 | 0 | 0 | .         | intergenic | NM_00100  | dist=47019. | . | .         | 22q11.1              |
| ACaP1:  | 22 | 16950000 | 17470000 | 0 | 0 | GAB4,TPT  | exonic     | NM_00103. | .           | . | ENST0000  | CpG: 24,C 22q11.1    |
| ACaP1:  | 22 | 39360000 | 39390000 | 0 | 0 | APOBEC3   | exonic     | NM_00119. | .           | . | ENST0000. | 22q13.1              |
| ACaP1:  | 22 | 46920000 | 46940000 | 0 | 0 | CELSR1    | exonic     | NM_01424. | .           | . | ENST0000  | CpG: 476 22q13.31    |
| ACaP1:X |    | 210000   | 310000   | 0 | 0 | LINC0068f | exonic     | NM_01222. | .           | . | ENST0000  | CpG: 75,C Xp22.33    |
| ACaP1:X |    | 83310000 | 84640000 | 0 | 0 | RPS6KA6,  | exonic     | NM_00101. | .           | . | ENST0000  | CpG: 46,C Xq21.2-Xq  |
| ACaP1:  | 1  | 25540000 | 25560000 | 0 | 0 | SYF2      | exonic     | NM_01548. | .           | . | ENST0000  | CpG: 45 1p36.11      |
| ACaP1:  | 1  | 43880000 | 43910000 | 0 | 0 | SZT2      | exonic     | NM_01528. | .           | . | ENST0000. | 1p34.2               |
| ACaP1:  | 1  | 1.45E+08 | 1.46E+08 | 0 | 0 | POLR3GL,  | exonic     | NM_00101. | .           | . | ENST0000  | CpG: 31,C 1q21.1     |
| ACaP1:  | 1  | 1.48E+08 | 1.5E+08  | 0 | 0 | PPIAL4E,F | exonic     | NM_00056. | .           | . | ENST0000  | CpG: 34,C 1q21.2     |
| ACaP1:  | 1  | 1.5E+08  | 1.5E+08  | 0 | 0 | HIST2H4A  | exonic     | NM_00103. | .           | . | ENST0000  | CpG: 133,( 1q21.2    |
| ACaP1:  | 2  | 2.2E+08  | 2.2E+08  | 0 | 0 | TUBA4A,S  | exonic     | NM_00100. | .           | . | ENST0000  | CpG: 90,C 2q35       |
| ACaP1:  | 3  | 44910000 | 44930000 | 0 | 0 | TGM4      | exonic     | NM_00324. | .           | . | ENST0000. | 3p21.31              |
| ACaP1:  | 3  | 44930000 | 45120000 | 0 | 0 | TGM4,CLF  | exonic     | NM_00113. | .           | . | ENST0000  | CpG: 54,C 3p21.31    |
| ACaP1:  | 3  | 48280000 | 49710000 | 0 | 0 | MIR711,Cf | exonic     | NM_00009. | .           | . | ENST0000  | CpG: 35,C 3p21.31    |
| ACaP1:  | 3  | 49710000 | 49940000 | 0 | 0 | TRAIP,GM  | exonic     | NM_00100. | .           | . | ENST0000  | CpG: 82,C 3p21.31    |
| ACaP1:  | 3  | 1E+08    | 1E+08    | 0 | 0 | TFG,ABI3F | exonic     | NM_00100. | .           | . | ENST0000. | 3q12.2               |
| ACaP1:  | 3  | 1E+08    | 1.01E+08 | 0 | 0 | ABI3BP    | exonic     | NM_01542. | .           | . | ENST0000. | 3q12.2               |
| ACaP1:  | 4  | 9200000  | 9220000  | 0 | 0 | USP17L18  | exonic     | NM_00125. | .           | . | ENST0000. | 4p16.1               |
| ACaP1:  | 4  | 9220000  | 9370000  | 0 | 0 | USP17L5,l | exonic     | NM_00124. | .           | . | ENST0000. | 4p16.1               |



|       |    |          |          |   |              |            |                      |   |   |                               |
|-------|----|----------|----------|---|--------------|------------|----------------------|---|---|-------------------------------|
| ACaP1 | 4  | 1.91E+08 | 1.91E+08 | 0 | 0 DUX4L4,D   | exonic     | NM_00112.            | . | . | ENST0000 CpG: 2005 4q35.2     |
| ACaP1 | 5  | 68910000 | 70530000 | 0 | 0 GTF2H2B,   | exonic     | NM_00034.            | . | . | ENST0000 CpG: 61,C 5q13.2     |
| ACaP1 | 5  | 1.32E+08 | 1.32E+08 | 0 | 0 SLC22A5,(  | exonic     | NM_00219.            | . | . | ENST0000 CpG: 72,C 5q31.1     |
| ACaP1 | 5  | 1.56E+08 | 1.57E+08 | 0 | 0 HAVCR1,(   | exonic     | NM_00109.            | . | . | ENST0000. 5q33.3              |
| ACaP1 | 6  | 25980000 | 26480000 | 0 | 0 HIST1H4G   | exonic     | NM_00041.            | . | . | ENST0000 CpG: 39,C 6p22.2     |
| ACaP1 | 6  | 30450000 | 30980000 | 0 | 0 MUC21,HL   | exonic     | NM_00101.            | . | . | ENST0000 CpG: 161,(6p21.33    |
| ACaP1 | 6  | 30980000 | 30990000 | 0 | 0 MUC22      | intronic   | NM_00119.            | . | . | ENST0000. 6p21.33             |
| ACaP1 | 6  | 30990000 | 31000000 | 0 | 0 MUC22      | exonic     | NM_00119.            | . | . | ENST0000. 6p21.33             |
| ACaP1 | 6  | 31000000 | 31960000 | 0 | 0 MIR4646,S  | exonic     | NM_00006.            | . | . | ENST0000 CpG: 19,C 6p21.33    |
| ACaP1 | 6  | 33130000 | 33290000 | 0 | 0 RXRB,TAF   | exonic     | NM_00107.            | . | . | ENST0000 CpG: 31,C 6p21.32    |
| ACaP1 | 6  | 41870000 | 42040000 | 0 | 0 MED20,CC   | exonic     | NM_00113.            | . | . | ENST0000 CpG: 41,C 6p21.1     |
| ACaP1 | 6  | 42040000 | 42100000 | 0 | 0 C6orf132,T | exonic     | NM_00116.            | . | . | ENST0000 CpG: 69 6p21.1       |
| ACaP1 | 6  | 42100000 | 42180000 | 0 | 0 GUCA1B,C   | exonic     | NM_00040.            | . | . | ENST0000 CpG: 19,C 6p21.1     |
| ACaP1 | 6  | 42180000 | 42200000 | 0 | 0 MRPS10,T   | exonic     | NM_01814.            | . | . | ENST0000. 6p21.1              |
| ACaP1 | 7  | 48520000 | 50140000 | 0 | 0 C7orf72,V\ | exonic     | NM_00115.            | . | . | ENST0000 CpG: 251,(7p12.2-p12 |
| ACaP1 | 7  | 50140000 | 50350000 | 0 | 0 IKZF1,C7o  | exonic     | NM_00116.            | . | . | ENST0000 CpG: 46,C 7p12.2     |
| ACaP1 | 7  | 1.01E+08 | 1.01E+08 | 0 | 0 MUC12      | intronic   | NM_00116.            | . | . | ENST0000. 7q22.1              |
| ACaP1 | 7  | 1.44E+08 | 1.44E+08 | 0 | 0 ARHGEF5    | exonic     | NM_00100.            | . | . | ENST0000 CpG: 44,C 7q35       |
| ACaP1 | 8  | 17470000 | 17490000 | 0 | 0 PDGFRL     | exonic     | NM_00620.            | . | . | ENST0000. 8p22                |
| ACaP1 | 8  | 86550000 | 86840000 | 0 | 0 REXO1L2f   | ncRNA_ex   | NR_00359.            | . | . | ENST0000 CpG: 130,(8q21.2     |
| ACaP1 | 9  | 35680000 | 35820000 | 0 | 0 FAM221B,   | exonic     | NM_00101.            | . | . | ENST0000 CpG: 54,C 9p13.3     |
| ACaP1 | 10 | 1.35E+08 | 1.36E+08 | 0 | 0 DUX4L3,L(  | exonic     | NM_00112.            | . | . | ENST0000 CpG: 1534 10q26.3    |
| ACaP1 | 10 | 1.36E+08 | 1.36E+08 | 0 | 0 .          | intergenic | NM_00112 dist=21542. | . | . | 10q26.3                       |
| ACaP1 | 12 | 6090000  | 7300000  | 0 | 0 TAPBPL,C   | exonic     | NM_00036.            | . | . | ENST0000 CpG: 74,C 12p13.31   |
| ACaP1 | 12 | 49220000 | 51220000 | 0 | 0 LIMA1,RNI  | exonic     | NM_00048.            | . | . | ENST0000 CpG: 21,C 12q13.12   |
| ACaP1 | 12 | 56210000 | 58230000 | 0 | 0 MIR6758,k  | exonic     | NM_00007.            | . | . | ENST0000 CpG: 86,C 12q14.1-q1 |
| ACaP1 | 12 | 1.08E+08 | 1.08E+08 | 0 | 0 BTBD11     | exonic     | NM_00101.            | . | . | ENST0000. 12q23.3             |
| ACaP1 | 13 | 24880000 | 25170000 | 0 | 0 TPTE2P6,l  | exonic     | NM_00643.            | . | . | ENST0000 CpG: 62,C 13q12.12   |
| ACaP1 | 13 | 31280000 | 31290000 | 0 | 0 ALOX5AP    | exonic     | NM_00120.            | . | . | 13q12.3                       |
| ACaP1 | 13 | 97990000 | 99670000 | 0 | 0 RNF113B,l  | exonic     | NM_00100.            | . | . | ENST0000 CpG: 22,C 13q32.2-q3 |
| ACaP1 | 13 | 99670000 | 99730000 | 0 | 0 DOCK9      | intronic   | NM_00113.            | . | . | ENST0000. 13q32.3             |
| ACaP1 | 13 | 99730000 | 1.11E+08 | 0 | 0 TPP2,UBA   | exonic     | NM_00012.            | . | . | ENST0000 CpG: 60,C 13q33.1-q3 |
| ACaP1 | 13 | 1.11E+08 | 1.15E+08 | 0 | 0 F10,SPAC.  | exonic     | NM_00013.            | . | . | ENST0000 CpG: 81,C 13q34      |
| ACaP1 | 13 | 1.15E+08 | 1.15E+08 | 0 | 0 CHAMP1,l   | exonic     | NM_00116.            | . | . | ENST0000 CpG: 100 13q34       |
| ACaP1 | 14 | 74000000 | 74010000 | 0 | 0 ACOT1,HE   | exonic     | NM_00103.            | . | . | ENST0000 CpG: 75 14q24.3      |

|       |    |          |          |   |   |            |            |           |             |   |           |                      |
|-------|----|----------|----------|---|---|------------|------------|-----------|-------------|---|-----------|----------------------|
| ACaP1 | 15 | 1.02E+08 | 1.02E+08 | 0 | 0 | .          | intergenic | NM_15233  | dist=5355;  | . | ENST0000. | 15q26.3              |
| ACaP1 | 16 | 16330000 | 19040000 | 0 | 0 | SMG1,ARL   | exonic     | NM_00100. | .           | . | ENST0000  | CpG: 51,C 16p12.3-p1 |
| ACaP1 | 16 | 19040000 | 19070000 | 0 | 0 | TMC7       | exonic     | NM_00116. | .           | . | ENST0000. | 16p12.3              |
| ACaP1 | 16 | 21390000 | 21500000 | 0 | 0 | LOC10019   | exonic     | NM_13046. | .           | . | ENST0000  | CpG: 26,C 16p12.2    |
| ACaP1 | 16 | 21500000 | 21510000 | 0 | 0 | LOC10027   | ncRNA_int  | NR_02715. | .           | . | .         | 16p12.2              |
| ACaP1 | 16 | 21510000 | 31580000 | 0 | 0 | ZKSCAN2,   | exonic     | NM_00003. | .           | . | ENST0000  | CpG: 23,C 16p11.2-p1 |
| ACaP1 | 16 | 85950000 | 89270000 | 0 | 0 | GALNS,M\   | exonic     | NM_00010. | .           | . | ENST0000  | CpG: 39,C 16q24.1-q2 |
| ACaP1 | 17 | 0        | 60000    | 0 | 0 | LOC10050   | exonic     | NM_00358. | .           | . | ENST0000  | CpG: 212,(17p13.3    |
| ACaP1 | 17 | 34390000 | 34810000 | 0 | 0 | CCL3L1,C\  | exonic     | NM_00100. | .           | . | ENST0000  | CpG: 16,C 17q12      |
| ACaP1 | 17 | 78270000 | 78710000 | 0 | 0 | LOC10029   | exonic     | NM_00116. | .           | . | ENST0000  | CpG: 18,C 17q25.3    |
| ACaP1 | 19 | 6410000  | 6440000  | 0 | 0 | MIR3940,k  | exonic     | NM_00368. | .           | . | ENST0000  | CpG: 28,C 19p13.3    |
| ACaP1 | 19 | 8840000  | 9100000  | 0 | 0 | ZNF558,M   | exonic     | NM_00100. | .           | . | ENST0000  | CpG: 51 19p13.2      |
| ACaP1 | 19 | 14680000 | 14870000 | 0 | 0 | NDUFB7,Z   | exonic     | NM_00120. | .           | . | ENST0000  | CpG: 29,C 19p13.12   |
| ACaP1 | 19 | 33440000 | 33670000 | 0 | 0 | C19orf40,F | exonic     | NM_01802. | .           | . | ENST0000  | CpG: 34,C 19q13.11   |
| ACaP1 | 19 | 43670000 | 43780000 | 0 | 0 | LOC28434   | exonic     | NM_00113. | .           | . | ENST0000. | 19q13.31             |
| ACaP1 | 20 | 2540000  | 2560000  | 0 | 0 | TMC2       | exonic     | NM_08075. | .           | . | ENST0000. | 20p13                |
| ACaP1 | 20 | 2560000  | 2650000  | 0 | 0 | SNORD57    | exonic     | NM_00125. | .           | . | ENST0000  | CpG: 121,(20p13      |
| ACaP1 | 20 | 34550000 | 35420000 | 0 | 0 | TGIF2-C2C  | exonic     | NM_00104. | .           | . | ENST0000  | CpG: 37,C 20q11.23   |
| ACaP1 | X  | 17730000 | 19860000 | 0 | 0 | PPEF1,RA   | exonic     | NM_00028. | .           | . | ENST0000  | CpG: 56,C Xp22.12-X  |
| ACaP1 | X  | 23390000 | 30270000 | 0 | 0 | PRDX4,M\   | exonic     | NM_00101. | .           | . | ENST0000  | CpG: 74,C Xp21.2-Xp  |
| ACaP1 | X  | 47050000 | 47230000 | 0 | 0 | CDK16,ZN   | exonic     | NM_00117. | .           | . | ENST0000  | CpG: 65,C Xp11.23    |
| ACaP1 | X  | 49150000 | 49770000 | 0 | 0 | GAGE2A,C   | exonic     | NM_00104. | .           | . | ENST0000  | CpG: 42,C Xp11.23    |
| ACaP1 | X  | 49770000 | 50050000 | 0 | 0 | MIR502,MI  | exonic     | NM_00008. | .           | . | ENST0000  | CpG: 16 Xp11.22-X    |
| ACaP1 | X  | 1.55E+08 | 1.55E+08 | 0 | 0 | IL9R       | exonic     | NM_00218. | .           | . | ENST0000  | CpG: 29 Xq28         |
| ACaP1 | X  | 1.55E+08 | 1.55E+08 | 0 | 0 | .          | intergenic | NM_00218  | dist=19518. | . | .         | Xq28                 |

| genomicSu | Repeat    | dgvMergec  | CopyNum | t Size   | CNVType | Genotype | GTConfidence |
|-----------|-----------|------------|---------|----------|---------|----------|--------------|
| .         | Score=254 | nsv830470  | 3       | 10000    | gain    | -1       | -1           |
| .         | Score=298 | esv265735  | 4       | 20000    | gain    | AABB     | 95.0698      |
| .         | Score=230 | esv271986  | 3       | 20000    | gain    | AAB      | 55.2336      |
| .         | Score=136 | nsv7313,n  | 3       | 10000    | gain    | -1       | -1           |
| .         | Score=390 | .          | 3       | 10000    | gain    | AAB      | 100          |
| .         | Score=192 | .          | 3       | 20000    | gain    | AAB      | 95.5602      |
| Score=0.9 | Score=645 | nsv513029  | 3       | 230000   | gain    | AAB      | -1           |
| Score=0.9 | Score=642 | esv266686  | 3       | 32010000 | gain    | AAB      | 0.616557     |
| .         | Score=634 | nsv876676  | 3       | 40000    | gain    | AAB      | -1           |
| Score=0.9 | Score=268 | nsv3752,e  | 3       | 990000   | gain    | AAB      | 13.5536      |
| .         | Score=200 | esv239877  | 3       | 40000    | gain    | AAB      | -1           |
| .         | Score=239 | nsv876679  | 4       | 50000    | gain    | -1       | -1           |
| Score=0.9 | Score=507 | esv26141,t | 3       | 15680000 | gain    | AAA      | -1           |
| Score=0.9 | Score=627 | nsv523112  | 1       | 42570000 | loss    | A        | -1           |
| Score=0.9 | Score=238 | nsv822925  | 3       | 140000   | gain    | AAB      | -1           |
| Score=0.9 | Score=668 | esv272937  | 3       | 31320000 | gain    | AAB      | 0.668971     |
| Score=0.9 | Score=510 | nsv4785,n  | 3       | 9730000  | gain    | AAB      | 2.70045      |
| Score=0.9 | Score=442 | esv265950  | 3       | 2320000  | gain    | AAB      | 12.7818      |
| Score=0.9 | Score=143 | esv273014  | 3       | 20000    | gain    | AAB      | -1           |
| .         | Score=274 | nsv823062  | 3       | 20000    | gain    | -1       | -1           |
| Score=0.9 | Score=285 | nsv880483  | 4       | 2150000  | gain    | AABB     | 100          |
| Score=0.9 | Score=607 | nsv526252  | 1       | 56870000 | loss    | A        | 1.46254      |
| .         | Score=434 | nsv7393    | 3       | 10000    | gain    | -1       | -1           |
| .         | Score=229 | esv266471  | 3       | 90000    | gain    | AAB      | 97.2606      |
| .         | Score=240 | dgv53n47,t | 3       | 10000    | gain    | -1       | -1           |
| .         | Score=223 | .          | 4       | 10000    | gain    | AABB     | 62.2499      |
| Score=0.9 | Score=229 | nsv831205  | 5       | 150000   | gain    | AAAAB    | -1           |
| Score=0.9 | Score=801 | nsv524542  | 5       | 20000    | gain    | AAAAB    | 14.9411      |
| .         | Score=145 | nsv892611  | 3       | 10000    | gain    | AAB      | 8.06487      |
| .         | Score=225 | nsv893055  | 3       | 10000    | gain    | -1       | -1           |
| .         | Score=759 | nsv468582  | 3       | 10000    | gain    | -1       | -1           |
| .         | Score=314 | nsv519118  | 3       | 30000    | gain    | -1       | -1           |
| Score=0.9 | Score=105 | nsv964,n   | 4       | 10000    | gain    | AAAB     | 100          |

|                                 |   |               |     |          |
|---------------------------------|---|---------------|-----|----------|
| Score=0.9; Score=263 esv993979  | 3 | 20160000 gain | AAB | -1       |
| Score=0.9; Score=270 esv5154,d  | 3 | 1810000 gain  | AAB | 0.455651 |
| Score=0.9; Score=282 nsv94485,c | 3 | 2640000 gain  | AAB | 0.624254 |
| . Score=142 dgv426n67           | 3 | 100000 gain   | AAB | -1       |
| Score=0.9; Score=342 esv274948  | 3 | 4860000 gain  | AAB | 2.17404  |
| Score=0.9; Score=182 nsv832946  | 3 | 100000 gain   | AAB | -1       |
| Score=0.9; Score=252 dgv2292n7  | 3 | 20000 gain    | AAA | 4.01767  |
| Score=0.9; Score=733 nsv832946  | 3 | 130000 gain   | AAA | 6.27554  |
| Score=0.9; Score=281 nsv514775  | 3 | 130000 gain   | AAB | -1       |
| Score=0.9; Score=641 esv997659  | 3 | 240000 gain   | AAB | 5.55805  |
| Score=0.9; Score=270 esv27055,c | 3 | 1440000 gain  | AAB | 2.87274  |
| . Score=255 dgv725e1,l          | 3 | 60000 gain    | AAB | -1       |
| Score=0.9; Score=281 dgv2324n7  | 3 | 400000 gain   | AAB | 3.95639  |
| Score=0.9; Score=584 nsv903959  | 3 | 20000 gain    | AAB | -1       |
| Score=0.9; Score=276 nsv903983  | 3 | 4140000 gain  | AAB | 1.50755  |
| . Score=199 nsv94945,c          | 3 | 70000 gain    | AAB | -1       |
| Score=0.9; Score=275 esv266432  | 3 | 1620000 gain  | AAB | 43.3513  |
| . Score=158 nsv523391           | 3 | 160000 gain   | AAB | -1       |
| Score=0.9; Score=631 esv268625  | 3 | 25700000 gain | AAB | 0.188277 |
| Score=0.9; Score=472 nsv904326  | 3 | 3130000 gain  | AAB | 1.62298  |
| . Score=273 esv268324           | 3 | 210000 gain   | AAB | -1       |
| Score=0.9; Score=162 nsv498848  | 3 | 630000 gain   | AAB | 100      |
| Score=0.9; Score=444 esv260862  | 3 | 33730000 gain | AAB | 0.395269 |
| . Score=965 dgv2453n7           | 3 | 70000 gain    | AAB | -1       |
| Score=0.9; Score=222 dgv453n67  | 3 | 250000 gain   | AAA | 1.25927  |
| Score=0.9; Score=544 nsv9315,n  | 3 | 11392 gain    | AAA | -1       |
| . . .                           | 3 | 60000 gain    | AAB | -1       |
| Score=0.9; Score=923 dgv2459n7  | 3 | 200000 gain   | AAB | 5.92928  |
| . Score=241 nsv904652           | 3 | 10000 gain    | AAB | -1       |
| Score=0.9; Score=102 esv136097  | 3 | 2110000 gain  | AAB | 1.37245  |
| . Score=113 esv272992           | 3 | 90000 gain    | AAB | -1       |
| . Score=492 nsv905139           | 3 | 30000 gain    | AAA | 54.5752  |
| . Score=250 nsv905139           | 3 | 40000 gain    | AAA | -1       |
| Score=0.9; Score=304 nsv827537  | 3 | 12250000 gain | AAB | 1.36397  |
| Score=0.9; Score=428 dgv812e1,c | 3 | 10000 gain    | AAB | -1       |

|                                 |   |              |     |          |
|---------------------------------|---|--------------|-----|----------|
| Score=0.9! Score=170 nsv433435  | 3 | 300000 gain  | AAB | 5.60356  |
| Score=0.9! Score=284 nsv9357,n  | 3 | 20000 gain   | AAB | -1       |
| Score=0.9! Score=100 esv198505  | 3 | 1240000 gain | AAB | 3.16905  |
| Score=0.9! Score=295 nsv9375,d  | 3 | 2470000 gain | AAB | 1.69366  |
| . Score=276 esv216908           | 3 | 10000 gain   | AAB | -1       |
| Score=0.9! Score=177 dgv346n27  | 3 | 60000 gain   | AAA | 78.4217  |
| Score=0.9! Score=252 nsv514798  | 3 | 920000 gain  | AAB | 3.11094  |
| Score=0.9! Score=689 nsv905577  | 3 | 100000 gain  | AAB | 60.6909  |
| Score=0.9! Score=247 nsv905580  | 3 | 10000 gain   | AAB | -1       |
| Score=0.9! Score=319 nsv820589  | 3 | 230000 gain  | AAB | 38.0299  |
| Score=0.9! Score=737 nsv435668  | 3 | 190000 gain  | AAB | 3.37336  |
| Score=0.9! Score=254 esv34235,i | 3 | 10000 gain   | AAB | -1       |
| Score=0.9! Score=128 esv267281  | 3 | 400000 gain  | AAB | 15.2144  |
| . Score=536 nsv511047           | 3 | 20000 gain   | AAB | -1       |
| Score=0.9! Score=891 esv995324  | 3 | 270000 gain  | AAB | 3.18502  |
| . Score=830 nsv905600           | 3 | 190000 gain  | AAB | -1       |
| Score=0.9! Score=383 esv271415  | 3 | 5380000 gain | AAB | 50.4084  |
| Score=0.9! Score=298 nsv526174  | 3 | 140000 gain  | AAB | -1       |
| Score=0.9! Score=110 nsv1776,n  | 3 | 450000 gain  | AAB | 5.2646   |
| Score=0.9! Score=103 dgv13n14,i | 3 | 40000 gain   | AAB | -1       |
| Score=0.9! Score=294 nsv9421,e  | 3 | 520000 gain  | AAB | 3.62776  |
| Score=0.9! Score=265 nsv905711  | 3 | 10000 gain   | AAB | -1       |
| Score=0.9! Score=796 nsv820959  | 3 | 200000 gain  | AAB | 7.82512  |
| Score=0.9! Score=128 nsv9429,e  | 3 | 350000 gain  | AAB | 27.12    |
| Score=0.9! Score=129 nsv9432,n  | 3 | 340000 gain  | AAA | 10.7904  |
| Score=0.9! Score=409 esv243613  | 3 | 1770000 gain | AAB | 2.53953  |
| Score=0.9! Score=186 dgv2679n7  | 3 | 150000 gain  | AAB | -1       |
| Score=0.9! Score=242 dgv2706n7  | 3 | 320000 gain  | AAB | 13.2731  |
| Score=0.9! Score=112 esv33069,c | 3 | 190000 gain  | AAB | -1       |
| Score=0.9! Score=280 esv9440,n  | 3 | 1290000 gain | AAB | 0.972516 |
| . Score=227 nsv9622             | 3 | 10000 gain   | -1  | -1       |
| Score=0.9! Score=274 esv271844  | 3 | 2150000 gain | AAB | 43.5935  |
| Score=0.9! Score=274 esv24627,t | 3 | 910000 gain  | AAB | 11.1928  |
| . Score=143 nsv526512           | 3 | 940000 gain  | AAB | 9.66075  |
| Score=0.9! Score=283 esv5547,e  | 3 | 1470000 gain | AAB | 1.04992  |

|                                |   |               |         |          |
|--------------------------------|---|---------------|---------|----------|
| . Score=261 esv271850          | 3 | 30000 gain    | AAB     | -1       |
| Score=0.9 Score=154 nsv138090  | 3 | 270000 gain   | AAB     | 1.46849  |
| . Score=262 nsv509739          | 3 | 20000 gain    | AAB     | -1       |
| Score=0.9 Score=551 nsv138463  | 3 | 1910000 gain  | AAB     | 3.66486  |
| Score=0.9 Score=319 nsv833823  | 3 | 900000 gain   | AAB     | 0.338089 |
| . Score=576 nsv522530          | 3 | 40000 gain    | AAB     | -1       |
| Score=0.9 Score=115 esv271854  | 3 | 340000 gain   | AAB     | 6.76229  |
| Score=0.9 Score=266 esv271855  | 3 | 600000 gain   | AAB     | 3.01197  |
| Score=0.9 Score=273 nsv911910  | 3 | 660000 gain   | AAB     | 18.2638  |
| Score=0.9 Score=751 nsv438306  | 3 | 30000 gain    | AAA     | 7.79637  |
| . Score=325 .                  | 3 | 10000 gain    | AAB     | 100      |
| . Score=775 nsv3499            | 3 | 30000 gain    | AAB     | 100      |
| . Score=290 nsv914272          | 3 | 20000 gain    |         | -1 -1    |
| . Score=232 nsv7350,n          | 3 | 10000 gain    | AAB     | 46.4057  |
| Score=0.9 Score=735 esv29271,u | 3 | 10000 gain    | AAB     | 44.3973  |
| . Score=259 nsv915368          | 3 | 20000 gain    | AAB     | 15.3225  |
| . Score=259 nsv517873          | 3 | 50000 gain    | AAB     | 7.82891  |
| Score=0.9 Score=271 dgv2463e1  | 1 | 1340000 loss  | A       | 65.9659  |
| . . .                          | 4 | 10000 gain    | AAAA    | -1       |
| Score=0.9 Score=405 dgv1e1,dg  | 4 | 30000 gain    | AAAA    | 3.60996  |
| . Score=198 .                  | 4 | 10000 gain    | AABB    | 100      |
| Score=0.9 Score=434 esv992038  | 1 | 29329373 loss | A       | -1       |
| Score=0.9 Score=626 esv114226  | 3 | 23940000 gain | AAB     | 0.225795 |
| . Score=274 nsv509860          | 3 | 630000 gain   | AAB     | -1       |
| Score=0.9 Score=385 nsv10352,u | 7 | 7850000 gain  | AAAAABB | 4.30696  |
| . Score=120 nsv877990          | 8 | 60000 gain    | AAAAAAB | -1       |
| Score=0.9 Score=536 nsv527268  | 8 | 8050000 gain  | AAAAAAB | 12.6957  |
| Score=0.9 Score=504 esv216788  | 7 | 7480000 gain  | AAAAABB | 4.01554  |
| . Score=223 nsv822370          | 7 | 70000 gain    | AAAAABB | -1       |
| . Score=265 esv28218,c         | 8 | 1260000 gain  | AAAAAAB | 100      |
| . Score=134 nsv878092          | 6 | 60000 gain    | AAAABB  | -1       |
| Score=0.9 Score=443 nsv10378,c | 6 | 8390000 gain  | AAAABB  | 51.9435  |
| Score=0.9 Score=719 esv26652,c | 6 | 30000 gain    | AAAABB  | -1       |
| Score=0.9 Score=360 dgv1562e1  | 4 | 20000 gain    | AAAA    | 4.87173  |
| Score=0.9 Score=571 esv26652,c | 4 | 62430 gain    | AAAA    | -1       |

|                                |   |             |      |    |         |
|--------------------------------|---|-------------|------|----|---------|
| . Score=277 esv272972          | 3 | 20000 gain  |      | -1 | -1      |
| . Score=734 nsv328970          | 3 | 10000 gain  |      | -1 | -1      |
| . Score=231 dgv6297n7          | 4 | 10000 gain  | AABB |    | 39.3356 |
| . Score=269 dgv1857e1          | 3 | 20000 gain  |      | -1 | -1      |
| . Score=675 .                  | 3 | 10000 gain  |      | -1 | -1      |
| . Score=243 nsv883108          | 4 | 10000 gain  | AABB |    | 46.8243 |
| Score=0.9! Score=223 nsv428134 | 4 | 110000 gain |      | -1 | -1      |
| Score=0.9! Score=415 dgv1n41,d | 3 | 20000 gain  | AAB  |    | 7.17626 |
| . Score=103 esv273194          | 3 | 80000 gain  |      | -1 | -1      |
| . Score=571 esv129459          | 4 | 10000 gain  |      | -1 | -1      |
| . Score=167 .                  | 3 | 10000 gain  |      | -1 | -1      |
| Score=0.9! Score=401 esv989554 | 4 | 20000 gain  | AAAB |    | 23.033  |
| . Score=234 nsv893513          | 3 | 10000 gain  | AAB  |    | 100     |
| . Score=308 .                  | 3 | 10000 gain  | AAB  |    | 100     |
| . Score=215 .                  | 3 | 10000 gain  |      | -1 | -1      |
| Score=0.9! Score=466 esv100910 | 3 | 40000 gain  | AAB  |    | 24.3583 |
| . Score=105 dgv228e1,u         | 3 | 70000 gain  | AAB  |    | 31.0088 |
| . Score=620 nsv7211,n          | 3 | 10000 gain  |      | -1 | -1      |
| . Score=135 nsv520995          | 3 | 30000 gain  | AAB  |    | 86.3897 |
| . Score=543 nsv618             | 3 | 40000 gain  | AAB  |    | 100     |
| . Score=109 esv274676          | 3 | 450000 gain | AAB  |    | 2.75218 |
| . Score=145 esv274816          | 4 | 10000 gain  | AABB |    | 100     |
| . Score=248 nsv1370            | 3 | 20000 gain  |      | -1 | -1      |
| . Score=256 nsv832851          | 4 | 10000 gain  | AAAB |    | 100     |
| . Score=955 nsv94861,u         | 3 | 140000 gain |      | -1 | -1      |
| Score=0.9! Score=736 nsv9315,n | 3 | 60000 gain  | AAB  |    | 8.83873 |
| Score=0.9! Score=544 nsv9315,n | 3 | 11392 gain  | AAB  |    | -1      |
| . Score=321 nsv103651          | 3 | 10000 gain  |      | -1 | -1      |
| . Score=628 esv265974          | 3 | 170000 gain | AAB  |    | 2.95149 |
| . Score=633 nsv905722          | 3 | 50000 gain  | AAB  |    | -1      |
| Score=0.9! Score=254 nsv821543 | 3 | 10000 gain  | AAB  |    | 28.6278 |
| . Score=258 nsv525170          | 3 | 90000 gain  | AAB  |    | 7.56032 |
| . Score=265 nsv833243          | 3 | 10000 gain  | AAB  |    | 100     |
| Score=0.9! Score=277 nsv9599,n | 1 | 40000 loss  | A    |    | -1      |
| Score=0.9! Score=277 esv3749,e | 1 | 80000 loss  | A    |    | 18.082  |

|                                 |   |          |      |        |         |
|---------------------------------|---|----------|------|--------|---------|
| Score=0.9; Score=471 esv260317  | 1 | 2850000  | loss | A      | 4.62697 |
| Score=0.9; Score=345 esv266498  | 1 | 3890000  | loss | A      | 8.06019 |
| Score=0.9; Score=523 esv256195  | 1 | 27580000 | loss | A      | -1      |
| . Score=268 nsv909546           | 1 | 280000   | loss | A      | 31.234  |
| Score=0.9; Score=477 nsv909685  | 1 | 26850000 | loss | A      | -1      |
| Score=0.9; Score=417 esv3212,e  | 1 | 15720000 | loss | A      | -1      |
| Score=0.8; Score=588 nsv131578  | 1 | 310000   | loss | A      | 39.6818 |
| . Score=240 esv267818           | 1 | 147248   | loss | A      | -1      |
| . . .                           | 3 | 60000    | gain | AAB    | -1      |
| Score=0.9; Score=424 nsv910070  | 3 | 20000    | gain | AAB    | 45.5978 |
| Score=0.9; Score=765 esv22059,u | 5 | 20000    | gain | AAAAB  | -1      |
| Score=0.9; Score=153 nsv910070  | 5 | 20000    | gain | AAAAB  | 100     |
| Score=0.9; Score=224 nsv821117  | 5 | 30000    | gain | AAAAB  | -1      |
| Score=0.9; Score=224 nsv9651,n  | 6 | 10000    | gain | AAAAAB | 100     |
| Score=0.9; Score=112 nsv821117  | 3 | 20000    | gain | AAA    | -1      |
| Score=0.9; Score=354 nsv471520  | 3 | 30000    | gain | AAA    | 10.7192 |
| . Score=265 nsv911030           | 3 | 140000   | gain | AAB    | 7.35528 |
| Score=0.9; Score=113 nsv137976  | 3 | 270000   | gain | -1     | -1      |
| . Score=318 .                   | 4 | 10000    | gain | AABB   | 100     |
| . Score=346 esv267175           | 3 | 10000    | gain | AAB    | 100     |
| . Score=147 nsv912687           | 3 | 90000    | gain | AAB    | 69.3148 |
| . Score=247 .                   | 3 | 10000    | gain | AAB    | 8.89668 |
| Score=0.9; Score=860 esv272392  | 1 | 20000    | loss | A      | -1      |
| Score=0.9; Score=838 dgv16n31,u | 1 | 270000   | loss | A      | -1      |
| Score=0.9; Score=193 nsv438327  | 1 | 1050000  | loss | A      | 25.0685 |
| . Score=421 esv242237           | 1 | 10000    | loss | A      | -1      |
| Score=0.9; Score=327 esv266829  | 1 | 1680000  | loss | A      | 5.3014  |
| Score=0.9; Score=107 nsv820435  | 1 | 60000    | loss | A      | -1      |
| Score=0.9; Score=147 nsv834157  | 1 | 410000   | loss | A      | 40.1088 |
| . Score=377 nsv914629           | 1 | 10000    | loss | A      | -1      |
| Score=0.9; Score=294 dgv4931n7  | 1 | 4430000  | loss | A      | -1      |
| Score=0.9; Score=121 nsv191239  | 1 | 1450000  | loss | A      | 9.60673 |
| Score=0.9; Score=249 nsv829171  | 1 | 30000    | loss | A      | -1      |
| Score=0.9; Score=194 esv215914  | 1 | 890000   | loss | A      | 4.67827 |
| . Score=361 nsv483006           | 1 | 20000    | loss | A      | -1      |



|                                 |   |              |      |         |
|---------------------------------|---|--------------|------|---------|
| Score=0.9; Score=282 nsv829181  | 1 | 4640000 loss | A    | -1      |
| Score=0.9; Score=135 nsv834185  | 1 | 670000 loss  | A    | 5.79616 |
| . Score=125 nsv915010           | 1 | 40000 loss   | A    | -1      |
| Score=0.9; Score=331 nsv834200  | 1 | 3800000 loss | A    | -1      |
| Score=0.9; Score=442 esv261809  | 1 | 4770000 loss | A    | -1      |
| Score=0.9; Score=223 esv173082  | 1 | 2310000 loss | A    | 49.2376 |
| Score=0.9; Score=253 esv33533,1 | 1 | 1180000 loss | A    | 5.55441 |
| Score=0.9; Score=253 essv13762  | 1 | 10000 loss   | A    | -1      |
| . Score=593.                    | 3 | 20000 gain   |      | -1 -1   |
| . Score=111 nsv518029           | 3 | 20000 gain   |      | -1 -1   |
| . Score=161.                    | 3 | 10000 gain   |      | -1 -1   |
| Score=0.9; Score=676 esv130737  | 3 | 230000 gain  | AAB  | 7.56032 |
| . Score=266 nsv509158           | 3 | 20000 gain   | AAB  | 100     |
| . Score=582 nsv528460           | 3 | 10000 gain   |      | -1 -1   |
| . Score=253 nsv4855,n           | 3 | 270000 gain  | AAB  | 28.2067 |
| . Score=238.                    | 3 | 10000 gain   |      | -1 -1   |
| . Score=214 esv268146           | 3 | 170000 gain  | AAB  | 100     |
| Score=0.8; Score=650 nsv834541  | 3 | 70000 gain   |      | -1 -1   |
| . Score=826 nsv877499           | 3 | 10000 gain   |      | -1 -1   |
| Score=0.9; Score=117 nsv7356,e  | 3 | 10000 gain   |      | -1 -1   |
| . Score=248 nsv7356             | 3 | 10000 gain   |      | -1 -1   |
| . Score=216 nsv829887           | 4 | 10000 gain   | AABB | 36.5748 |
| . Score=511 nsv525865           | 4 | 10000 gain   |      | -1 -1   |
| . Score=407 nsv881708           | 4 | 10000 gain   |      | -1 -1   |
| . Score=246 nsv882683           | 3 | 10000 gain   | AAB  | 63.058  |
| . Score=141 esv26352,1          | 3 | 30000 gain   |      | -1 -1   |
| . Score=327 dgv7108n7           | 4 | 10000 gain   |      | -1 -1   |
| . Score=567.                    | 3 | 10000 gain   | AAB  | 100     |
| . Score=800 esv101044           | 3 | 410000 gain  | AAB  | 56.1048 |
| . Score=379 nsv521781           | 3 | 30000 gain   |      | -1 -1   |
| . Score=712 esv273521           | 4 | 10000 gain   | AABB | 31.1743 |
| Score=0.9; Score=836 esv273612  | 3 | 120000 gain  | AAB  | 100     |
| . Score=472 nsv893491           | 4 | 10000 gain   |      | -1 -1   |
| . Score=535.                    | 3 | 10000 gain   | AAB  | 7.5058  |
| . Score=400.                    | 4 | 10000 gain   | AABB | 100     |

|           |                      |   |             |      |         |
|-----------|----------------------|---|-------------|------|---------|
| .         | Score=181.           | 4 | 10000 gain  | AABB | 100     |
| .         | Score=727 dgv753n71  | 4 | 10000 gain  | AAAB | 100     |
| .         | Score=225 nsv825578  | 4 | 10000 gain  | AABB | 100     |
| .         | Score=602 nsv7607,e  | 3 | 20000 gain  | AAB  | 100     |
| .         | Score=846 dgv397e1,  | 3 | 10000 gain  |      | -1 -1   |
| .         | Score=223 nsv832216  | 4 | 10000 gain  | AABB | 32.8279 |
| Score=0.9 | Score=269 dgv1242n7  | 3 | 270000 gain | AAB  | 100     |
| .         | Score=197 esv107357  | 4 | 10000 gain  | AABB | 23.1335 |
| .         | Score=285 nsv832278  | 3 | 10000 gain  |      | -1 -1   |
| .         | Score=143.           | 3 | 20000 gain  | AAA  | 100     |
| .         | Score=340 nsv469190  | 3 | 10000 gain  |      | -1 -1   |
| .         | Score=325 nsv832399  | 3 | 10000 gain  |      | -1 -1   |
| .         | Score=103 esv29777,c | 3 | 40000 gain  | AAB  | 44.0877 |
| .         | Score=529 nsv900076  | 3 | 10000 gain  |      | -1 -1   |
| .         | Score=161 nsv901506  | 3 | 10000 gain  | AAB  | 100     |
| .         | Score=224.           | 3 | 10000 gain  |      | -1 -1   |
| .         | Score=141 esv21487,c | 3 | 60000 gain  | AAB  | 100     |
| .         | Score=412.           | 3 | 10000 gain  | AAB  | 74.1514 |
| .         | Score=248 nsv902113  | 3 | 10000 gain  |      | -1 -1   |
| .         | Score=517 nsv832856  | 3 | 30000 gain  |      | -1 -1   |
| .         | Score=245 nsv457172  | 3 | 10000 gain  |      | -1 -1   |
| .         | Score=241 dgv521e1E  | 3 | 10000 gain  |      | -1 -1   |
| .         | Score=612 nsv833509  | 3 | 10000 gain  |      | -1 -1   |
| .         | Score=218 nsv2229,n  | 3 | 100000 gain | AAB  | 67.9837 |
| .         | Score=149 esv266855  | 3 | 10000 gain  | AAB  | 100     |
| .         | Score=150.           | 3 | 20000 gain  | AAA  | 100     |
| .         | Score=109 nsv913579  | 3 | 10000 gain  | AAB  | 100     |
| .         | Score=277.           | 3 | 40000 gain  |      | -1 -1   |
| .         | Score=240 nsv834073  | 4 | 10000 gain  | AABB | 72.6802 |
| .         | Score=357 nsv913820  | 3 | 10000 gain  |      | -1 -1   |
| .         | Score=790 esv272432  | 3 | 30000 gain  | AAB  | 72.0264 |
| .         | Score=269 nsv520230  | 3 | 10000 gain  |      | -1 -1   |
| Score=0.9 | Score=346 esv266443  | 4 | 10000 gain  |      | -1 -1   |
| .         | Score=323 dgv56n68   | 4 | 10000 gain  | AABB | 52.9243 |
| .         | Score=246 nsv519522  | 3 | 10000 gain  | AAB  | 51.8194 |

|           |                      |   |               |      |    |          |
|-----------|----------------------|---|---------------|------|----|----------|
| Score=0.9 | Score=276 esv272013  | 3 | 200000 gain   |      | -1 | -1       |
| .         | Score=737 .          | 3 | 20000 gain    |      | -1 | -1       |
| .         | Score=575 dgv4353n7  | 4 | 10000 gain    |      | -1 | -1       |
| .         | Score=258 nsv428406  | 3 | 30000 gain    |      | -1 | -1       |
| Score=0.9 | Score=590 dgv5235n7  | 3 | 19000000 gain | AAB  |    | 1.02154  |
| Score=0.9 | Score=632 nsv822252  | 3 | 260000 gain   | AAB  |    | -1       |
| Score=0.9 | Score=626 esv257722  | 3 | 65400000 gain | AAB  |    | 0.525643 |
| Score=0.9 | Score=289 nsv4189,e  | 3 | 2360000 gain  | AAB  |    | 3.32391  |
| Score=0.9 | Score=113 dgv5383n7  | 3 | 30000 gain    | AAB  |    | -1       |
| Score=0.9 | Score=719 nsv471429  | 3 | 80000 gain    | AAB  |    | 19.7034  |
| Score=0.9 | Score=571 esv26652,c | 3 | 62430 gain    | AAB  |    | -1       |
| .         | Score=104 esv272688  | 4 | 10000 gain    | AAAB |    | 100      |
| .         | Score=112 nsv879725  | 4 | 70000 gain    | AABB |    | 50.1201  |
| .         | Score=109 dgv1712e1  | 4 | 10000 gain    |      | -1 | -1       |
| .         | Score=451 nsv880584  | 3 | 20000 gain    | AAB  |    | 100      |
| .         | Score=974 esv136246  | 3 | 340000 gain   | AAB  |    | 10.1621  |
| .         | Score=292 esv273298  | 3 | 20000 gain    |      | -1 | -1       |
| .         | Score=260 .          | 3 | 20000 gain    |      | -1 | -1       |
| .         | Score=245 nsv831463  | 3 | 20000 gain    | AAB  |    | 8.0889   |
| .         | Score=247 nsv891675  | 3 | 10000 gain    | AAB  |    | 17.804   |
| .         | Score=546 dgv8253n7  | 3 | 20000 gain    |      | -1 | -1       |
| Score=0.9 | Score=243 nsv831668  | 3 | 30000 gain    |      | -1 | -1       |
| .         | Score=261 .          | 3 | 10000 gain    |      | -1 | -1       |
| .         | Score=269 .          | 3 | 10000 gain    |      | -1 | -1       |
| .         | Score=626 esv272084  | 3 | 30000 gain    |      | -1 | -1       |
| .         | Score=291 nsv831886  | 3 | 10000 gain    |      | -1 | -1       |
| .         | Score=616 esv259044  | 3 | 50000 gain    | AAB  |    | 7.56032  |
| .         | Score=556 nsv508601  | 3 | 10000 gain    | AAB  |    | 100      |
| .         | Score=476 nsv7211,n  | 3 | 10000 gain    |      | -1 | -1       |
| .         | Score=256 .          | 4 | 10000 gain    | AAAB |    | 100      |
| .         | .                    | 3 | 60000 gain    | AAB  |    | -1       |
| Score=0.9 | Score=670 .          | 3 | 20000 gain    | AAB  |    | 100      |
| Score=0.9 | Score=372 .          | 3 | 20000 gain    | AAB  |    | 10.4263  |
| .         | Score=228 nsv899336  | 3 | 10000 gain    |      | -1 | -1       |
| .         | Score=191 nsv899873  | 3 | 230000 gain   | AAA  |    | 100      |

|            |                      |   |              |      |         |
|------------|----------------------|---|--------------|------|---------|
| .          | Score=550 nsv518593  | 3 | 40000 gain   | AAB  | 100     |
| .          | Score=259 dgv250e2C  | 4 | 10000 gain   | AABB | 100     |
| .          | Score=233 dgv250e2C  | 4 | 10000 gain   |      | -1 -1   |
| .          | Score=825 esv274787  | 3 | 10000 gain   | AAB  | 100     |
| .          | Score=246 nsv519018  | 3 | 30000 gain   | AAB  | 100     |
| .          | Score=261 nsv901620  | 3 | 20000 gain   | AAB  | 42.6508 |
| .          | Score=115 esv32599,0 | 3 | 160000 gain  |      | -1 -1   |
| .          | Score=896 nsv904306  | 3 | 60000 gain   |      | -1 -1   |
| Score=0.9! | Score=724 nsv9484,e  | 3 | 120000 gain  | AAB  | 17.7699 |
| Score=0.9! | Score=350 esv24801,1 | 3 | 64753 gain   | AAB  | -1      |
| .          | Score=219 essv8,esv2 | 3 | 10000 gain   | AAB  | 100     |
| Score=0.9! | Score=471 .          | 4 | 10000 gain   | AABB | 95.0698 |
| .          | Score=238 nsv457890  | 3 | 10000 gain   | AAB  | 100     |
| Score=0.9! | Score=277 nsv9599,n  | 3 | 40000 gain   | AAB  | -1      |
| Score=0.9! | Score=277 esv8460,n  | 3 | 80000 gain   | AAB  | 7.72808 |
| .          | Score=430 esv267763  | 4 | 20000 gain   | AAAB | 100     |
| .          | Score=258 nsv828176  | 3 | 110000 gain  | AAA  | 100     |
| .          | Score=147 nsv833595  | 3 | 380000 gain  |      | -1 -1   |
| Score=0.9! | Score=269 nsv909588  | 3 | 520000 gain  | AAB  | 7.56778 |
| .          | Score=265 nsv909614  | 4 | 40000 gain   |      | -1 -1   |
| .          | Score=766 nsv131347  | 4 | 140000 gain  | AABB | 25.8795 |
| .          | Score=726 esv267866  | 3 | 20000 gain   | AAB  | -1      |
| .          | Score=347 nsv132192  | 3 | 1490000 gain | AAB  | 100     |
| Score=0.9! | Score=286 esv264390  | 3 | 830000 gain  | AAB  | 31.3463 |
| .          | Score=624 esv271716  | 3 | 80000 gain   | AAB  | -1      |
| .          | .                    | 3 | 60000 gain   | AAB  | -1      |
| Score=0.9! | Score=224 nsv9651,e  | 3 | 150000 gain  | AAB  | 7.12562 |
| Score=0.9! | Score=274 esv274273  | 3 | 940000 gain  | AAB  | 2.63737 |
| Score=0.9! | Score=825 dgv1353e1  | 4 | 30000 gain   | AAAB | 48.6559 |
| .          | Score=130 esv259744  | 3 | 10000 gain   |      | -1 -1   |
| .          | Score=175 nsv834099  | 3 | 140000 gain  | AAB  | 100     |
| .          | Score=769 nsv470903  | 3 | 30000 gain   |      | -1 -1   |
| .          | Score=243 nsv834145  | 4 | 10000 gain   | AAAB | 100     |
| .          | Score=265 nsv521825  | 3 | 10000 gain   |      | -1 -1   |
| .          | Score=237 esv158407  | 3 | 10000 gain   |      | -1 -1   |

|   |                                |   |             |      |    |         |
|---|--------------------------------|---|-------------|------|----|---------|
| . | Score=276 esv274061            | 3 | 20000 gain  |      | -1 | -1      |
| . | Score=285 nsv834528            | 4 | 10000 gain  |      | -1 | -1      |
| . | Score=714 nsv460837            | 4 | 10000 gain  | AABB |    | 84.4308 |
| . | Score=105 nsv4277,e            | 3 | 100000 gain | AAB  |    | 58.9542 |
| . | Score=158 nsv522792            | 3 | 10000 gain  |      | -1 | -1      |
| . | Score=255 .                    | 3 | 10000 gain  | AAB  |    | 100     |
| . | Score=239 esv29160,t           | 3 | 40000 gain  |      | -1 | -1      |
| . | Score=228 nsv462021            | 4 | 10000 gain  | AABB |    | 26.3282 |
| . | Score=189 nsv883106            | 3 | 10000 gain  | AAB  |    | 100     |
| . | Score=372 nsv886330            | 4 | 10000 gain  | AAAB |    | 100     |
| . | Score=195 nsv830825            | 3 | 20000 gain  |      | -1 | -1      |
| . | Score=0.9! Score=468 nsv5606,n | 3 | 20000 gain  | AAB  |    | 30.4257 |
| . | .                              | 3 | 55067 gain  | AAB  |    | -1      |
| . | Score=0.9! Score=244 nsv8095,e | 3 | 10000 gain  | AAB  |    | 16.6468 |
| . | Score=781 esv100059            | 3 | 250000 gain | AAB  |    | 11.3057 |
| . | Score=474 nsv466430            | 3 | 20000 gain  | AAB  |    | 7.56032 |
| . | Score=122 nsv893828            | 3 | 260000 gain |      | -1 | -1      |
| . | Score=119 nsv467190            | 3 | 10000 gain  |      | -1 | -1      |
| . | Score=281 esv267885            | 3 | 210000 gain | AAB  |    | 31.9552 |
| . | Score=101 esv266599            | 3 | 10000 gain  | AAB  |    | 18.022  |
| . | Score=227 nsv899500            | 4 | 10000 gain  | AABB |    | 100     |
| . | Score=780 .                    | 4 | 10000 gain  | AAAB |    | 100     |
| . | Score=233 esv274764            | 4 | 10000 gain  | AABB |    | 43.1713 |
| . | Score=261 nsv904254            | 3 | 10000 gain  |      | -1 | -1      |
| . | Score=667 nsv1576              | 3 | 20000 gain  | AAB  |    | 100     |
| . | Score=242 esv274981            | 3 | 10000 gain  | AAB  |    | 58.1509 |
| . | Score=261 nsv517068            | 3 | 10000 gain  |      | -1 | -1      |
| . | Score=608 nsv2023              | 3 | 10000 gain  |      | -1 | -1      |
| . | Score=331 nsv833499            | 3 | 20000 gain  | AAB  |    | 7.71883 |
| . | Score=483 dgv184n21            | 3 | 10000 gain  | AAB  |    | 100     |
| . | Score=241 dgv1073e1            | 3 | 10000 gain  | AAB  |    | 95.5602 |
| . | Score=346 dgv1074e1            | 3 | 10000 gain  | AAB  |    | 27.5256 |
| . | Score=0.9! Score=121 nsv2471,n | 3 | 10000 gain  | AAB  |    | 87.2075 |
| . | Score=118 nsv912653            | 3 | 10000 gain  |      | -1 | -1      |
| . | Score=188 nsv912812            | 3 | 10000 gain  | AAB  |    | 70.5974 |

|            |                      |   |             |       |         |
|------------|----------------------|---|-------------|-------|---------|
| .          | Score=775 nsv438323  | 3 | 80000 gain  | AAB   | 100     |
| .          | Score=544 .          | 4 | 10000 gain  | AABB  | 81.2481 |
| .          | Score=155 .          | 3 | 10000 gain  |       | -1 -1   |
| .          | Score=192 .          | 3 | 10000 gain  |       | -1 -1   |
| .          | Score=139 nsv520351  | 4 | 10000 gain  |       | -1 -1   |
| .          | Score=258 nsv820102  | 4 | 10000 gain  | AABB  | 9.11279 |
| .          | Score=179 nsv830148  | 4 | 20000 gain  | AABB  | 100     |
| .          | Score=131 esv266234  | 3 | 190000 gain | AAB   | 84.4527 |
| Score=0.9! | Score=360 nsv874473  | 5 | 10000 gain  | AAAAB | 12.2095 |
| Score=0.9! | Score=157 dgv5107n7  | 3 | 330000 gain | AAB   | 100     |
| .          | Score=286 nsv3835,n: | 3 | 20000 gain  | AAB   | 62.1648 |
| .          | Score=100 nsv877395  | 4 | 70000 gain  | AABB  | 30.8865 |
| .          | Score=138 esv272745  | 3 | 50000 gain  | AAB   | 100     |
| .          | Score=149 esv271243  | 3 | 70000 gain  |       | -1 -1   |
| .          | Score=222 esv27759,l | 3 | 280000 gain | AAB   | 3.92557 |
| .          | Score=229 nsv5290,e: | 3 | 260000 gain | AAB   | 30.1359 |
| .          | Score=647 .          | 4 | 40000 gain  | AABB  | 35.9746 |
| .          | Score=371 dgv254e55  | 4 | 10000 gain  | AAAB  | 100     |
| Score=0.9! | Score=244 nsv818679  | 3 | 550000 gain | AAB   | 61.5232 |
| .          | Score=225 nsv892190  | 4 | 10000 gain  | AABB  | 100     |
| .          | Score=554 esv273913  | 5 | 10000 gain  | AAABB | 34.3634 |
| .          | Score=737 esv274391  | 5 | 10000 gain  |       | -1 -1   |
| Score=0.9! | Score=234 nsv825963  | 5 | 10000 gain  | AAABB | 100     |
| .          | Score=631 esv274507  | 3 | 30000 gain  |       | -1 -1   |
| .          | Score=250 dgv446e1,l | 5 | 10000 gain  | AAABB | 65.6953 |
| .          | Score=145 dgv508e1,l | 3 | 30000 gain  |       | -1 -1   |
| .          | Score=214 dgv94n21,l | 4 | 10000 gain  | AABB  | 100     |
| .          | Score=234 esv274676  | 5 | 10000 gain  | AAABB | 36.9759 |
| .          | Score=202 dgv1810n7  | 4 | 10000 gain  | AABB  | 100     |
| .          | Score=234 dgv137n21  | 4 | 10000 gain  |       | -1 -1   |
| .          | Score=464 esv274900  | 3 | 180000 gain | AAB   | 63.0321 |
| .          | Score=755 nsv832855  | 4 | 10000 gain  | AAAB  | 100     |
| .          | Score=221 nsv456427  | 4 | 10000 gain  |       | -1 -1   |
| Score=0.9! | Score=236 dgv2148n7  | 4 | 10000 gain  | AABB  | 96.6962 |
| Score=0.9! | Score=300 nsv7266,n: | 3 | 40000 gain  | AAB   | 100     |

|            |                     |   |              |       |         |
|------------|---------------------|---|--------------|-------|---------|
| .          | Score=260 nsv510668 | 3 | 200000 gain  | -1    | -1      |
| .          | Score=239 esv274989 | 4 | 10000 gain   | -1    | -1      |
| .          | Score=235 nsv904605 | 4 | 10000 gain   | -1    | -1      |
| .          | Score=232 nsv833141 | 4 | 10000 gain   | -1    | -1      |
| .          | Score=215 nsv833343 | 5 | 10000 gain   | AAABB | 100     |
| .          | Score=329 esv33941  | 4 | 10000 gain   | -1    | -1      |
| .          | Score=240 nsv910068 | 3 | 70000 gain   | AAB   | 55.8333 |
| .          | Score=723 nsv910069 | 3 | 67248 gain   | AAB   | -1      |
| .          | Score=266 nsv833702 | 3 | 10000 gain   | AAB   | 100     |
| .          | Score=255 nsv470107 | 3 | 10000 gain   | AAB   | 26.839  |
| .          | Score=268 esv274471 | 3 | 130000 gain  | AAB   | 90.9651 |
| .          | Score=250 dgv3656n7 | 3 | 10000 gain   | AAB   | 100     |
| .          | Score=252 nsv833754 | 4 | 10000 gain   | -1    | -1      |
| .          | Score=621 nsv2452,d | 4 | 10000 gain   | AABB  | 65.4883 |
| .          | Score=278 nsv470139 | 4 | 10000 gain   | AABB  | 37.3501 |
| .          | Score=361 nsv509745 | 3 | 10000 gain   | AAB   | 30.0415 |
| .          | Score=242 nsv2508   | 4 | 20000 gain   | AABB  | 77.2089 |
| .          | Score=223 nsv510781 | 4 | 10000 gain   | AABB  | 100     |
| .          | Score=230 esv100777 | 3 | 1200000 gain | AAB   | 20.0564 |
| Score=0.9! | Score=274 esv272306 | 3 | 940000 gain  | AAB   | 2.10058 |
| .          | Score=401 nsv834055 | 3 | 10000 gain   | -1    | -1      |
| .          | Score=259 nsv913680 | 4 | 10000 gain   | -1    | -1      |
| .          | Score=243 esv28721  | 4 | 10000 gain   | AABB  | 56.8538 |
| .          | Score=114 nsv3534,e | 3 | 10000 gain   | AAB   | 100     |
| .          | Score=464 dgv4761n7 | 3 | 10000 gain   | AAB   | 77.5138 |
| .          | Score=257 nsv915003 | 4 | 10000 gain   | -1    | -1      |
| .          | Score=246 nsv834217 | 4 | 10000 gain   | -1    | -1      |
| .          | Score=259 esv272444 | 4 | 20000 gain   | AABB  | 23.8127 |
| Score=0.9! | Score=277 esv275231 | 4 | 20000 gain   | AABB  | 100     |
| Score=0.9! | Score=616 esv106316 | 3 | 880000 gain  | AAB   | 4.46373 |
| Score=0.9! | Score=166 esv270761 | 3 | 710000 gain  | AAB   | 44.673  |
| .          | Score=142 .         | 5 | 20000 gain   | -1    | -1      |
| .          | Score=594 nsv830360 | 3 | 20000 gain   | AAB   | 100     |
| .          | Score=976 .         | 4 | 20000 gain   | AABB  | 41.1754 |
| .          | Score=639 esv267703 | 3 | 20000 gain   | AAB   | 40.545  |

|           |                      |   |             |      |         |
|-----------|----------------------|---|-------------|------|---------|
| .         | Score=566 esv273521  | 4 | 20000 gain  | AABB | 100     |
| .         | Score=514 dgv7631n7  | 4 | 20000 gain  | AABB | 71.8887 |
| .         | Score=398 nsv6397    | 4 | 10000 gain  | AABB | 71.9763 |
| .         | Score=149 esv255542  | 3 | 350000 gain | AAB  | 8.47197 |
| .         | Score=237 nsv467312  | 4 | 10000 gain  | AABB | 100     |
| Score=0.9 | Score=654 esv267244  | 4 | 230000 gain | AABB | 16.6802 |
| .         | Score=394 nsv519327  | 3 | 20000 gain  | AAA  | 34.6358 |
| .         | Score=150 nsv832086  | 4 | 10000 gain  |      | -1 -1   |
| .         | Score=561 nsv521130  | 3 | 20000 gain  | AAA  | 100     |
| Score=0.9 | Score=307 esv265839  | 3 | 90000 gain  | AAA  | -1      |
| Score=0.9 | Score=399 dgv454e1,u | 3 | 40000 gain  | AAA  | 54.5785 |
| .         | Score=531 nsv8986,e  | 3 | 60000 gain  |      | -1 -1   |
| Score=0.9 | Score=553 nsv7234,d  | 3 | 20000 gain  | AAB  | 100     |
| .         | Score=457 nsv889     | 3 | 10000 gain  |      | -1 -1   |
| .         | Score=618 nsv900,ns  | 3 | 50000 gain  |      | -1 -1   |
| Score=0.9 | Score=247 nsv483010  | 3 | 10000 gain  | AAA  | 67.7827 |
| Score=0.9 | Score=476 nsv515960  | 3 | 80000 gain  | AAA  | -1      |
| .         | Score=562 nsv832566  | 4 | 10000 gain  |      | -1 -1   |
| .         | Score=361 nsv899931  | 3 | 30000 gain  | AAB  | -1      |
| Score=0.9 | Score=274 esv274715  | 3 | 960000 gain | AAB  | 14.0941 |
| Score=0.9 | Score=231 nsv899941  | 3 | 250000 gain | AAB  | -1      |
| .         | Score=271 nsv510948  | 3 | 320000 gain | AAB  | 6.98223 |
| .         | Score=305 nsv899993  | 4 | 20000 gain  |      | -1 -1   |
| .         | Score=224 nsv900551  | 3 | 30000 gain  |      | -1 -1   |
| .         | Score=260 esv33189,u | 3 | 10000 gain  | AAA  | 100     |
| .         | Score=158 nsv832763  | 3 | 150000 gain | AAA  | -1      |
| Score=0.9 | Score=151 nsv902015  | 3 | 80000 gain  |      | -1 -1   |
| .         | Score=102 esv269192  | 3 | 140000 gain | AAB  | 100     |
| .         | Score=184 nsv1307,n  | 3 | 120000 gain | AAB  | -1      |
| Score=0.9 | Score=277 nsv85157,t | 3 | 390000 gain | AAA  | 100     |
| Score=0.9 | Score=378 esv274883  | 3 | 120000 gain |      | -1 -1   |
| .         | Score=350 nsv902081  | 4 | 20000 gain  | AABB | 100     |
| .         | Score=254 .          | 3 | 20000 gain  | AAA  | 100     |
| .         | Score=432 esv269970  | 3 | 210000 gain | AAA  | -1      |
| .         | Score=212 nsv518383  | 3 | 170000 gain | AAB  | 52.509  |



|                                 |   |              |       |          |
|---------------------------------|---|--------------|-------|----------|
| . Score=291 nsv522389           | 3 | 20000 gain   | AAA   | 36.8066  |
| . Score=561 esv258944           | 3 | 20000 gain   | -1    | -1       |
| . Score=909 nsv817698           | 4 | 40000 gain   | AABB  | 63.7447  |
| Score=0.9! Score=286 dgv897e1,! | 3 | 250000 gain  | AAB   | 6.14723  |
| Score=0.9! Score=965 dgv3213n7  | 3 | 310000 gain  | AAB   | 18.1366  |
| Score=0.9! Score=303 esv271613  | 3 | 60000 gain   | -1    | -1       |
| . Score=524 esv28832,!          | 3 | 50000 gain   | AAB   | 23.7256  |
| . Score=106 .                   | 4 | 20000 gain   | -1    | -1       |
| . Score=145 esv268292           | 4 | 50000 gain   | -1    | -1       |
| . Score=999 nsv2311,n!          | 3 | 20000 gain   | AAA   | 100      |
| . Score=106 esv271822           | 4 | 100000 gain  | AAAB  | 100      |
| . Score=270 esv100658           | 3 | 10000 gain   | AAB   | 77.1146  |
| Score=0.9! Score=303 essv8523,c | 3 | 20000 gain   | AAA   | 100      |
| . Score=147 nsv7350,e!          | 4 | 20000 gain   | AAAB  | 100      |
| . Score=255 .                   | 5 | 10000 gain   | AAABB | 28.5494  |
| . Score=720 nsv519012           | 5 | 10000 gain   | AAABB | 100      |
| Score=0.9! Score=233 nsv515203  | 3 | 200000 gain  | AAB   | 51.4323  |
| Score=0.9! Score=287 esv100763  | 3 | 5770000 gain | AAB   | 0.195804 |
| . Score=255 esv271776           | 3 | 130000 gain  | AAB   | -1       |
| Score=0.9! Score=507 esv33703,! | 3 | 1290000 gain | AAB   | 56.8813  |
| Score=0.9! Score=434 esv5765,e! | 3 | 690000 gain  | AAB   | 23.8929  |
| . Score=224 .                   | 5 | 10000 gain   | -1    | -1       |
| Score=0.9! Score=114 nsv515016  | 3 | 170000 gain  | AAB   | 31.6153  |
| Score=0.9! Score=291 nsv515029  | 3 | 120000 gain  | AAA   | 6.82657  |
| . Score=539 esv130271           | 3 | 10000 gain   | AAA   | -1       |
| . Score=136 esv173299           | 4 | 10000 gain   | AABB  | 100      |
| Score=0.9! Score=245 esv267691  | 4 | 30000 gain   | AABB  | 5.7772   |
| . Score=904 dgv545e1,!          | 3 | 100000 gain  | -1    | -1       |
| . Score=294 esv274714           | 3 | 20000 gain   | AAA   | 100      |
| Score=0.9! Score=348 dgv394n67  | 3 | 10000 gain   | AAB   | -1       |
| Score=0.9! Score=717 nsv817656  | 3 | 890000 gain  | AAB   | 2.89565  |
| . . .                           | 3 | 59540 gain   | AAB   | -1       |
| Score=0.9! Score=288 esv27669,! | 0 | 30000 loss   | -1    | -1       |
| . Score=809 nsv833230           | 1 | 10000 loss   | -1    | -1       |
| . Score=961 esv33029            | 1 | 10000 loss   | -1    | -1       |

|                                 |   |               |      |         |
|---------------------------------|---|---------------|------|---------|
| Score=0.9! Score=274 esv250329  | 3 | 6250000 gain  | AAB  | 6.04995 |
| Score=0.9! Score=112 esv267773  | 3 | 740000 gain   | AAB  | 45.8354 |
| Score=0.9! Score=233 nsv515201  | 3 | 200000 gain   | AAA  | 15.732  |
| Score=0.9! Score=821 dgv41n71,1 | 1 | 70000 loss    | A    | 23.8957 |
| Score=0.9! Score=220 dgv66e19E  | 3 | 680000 gain   | AAB  | 5.22178 |
| Score=0.9! Score=257 nsv7181,d  | 3 | 20000 gain    | AAB  | -1      |
| Score=0.9! Score=220 dgv16n16,1 | 3 | 190000 gain   | AAB  | 3.66037 |
| . Score=263 dgv344n71           | 4 | 30000 gain    | AAAB | -1      |
| Score=0.9! Score=107 nsv2655,d  | 4 | 300000 gain   | AAAB | 3.24742 |
| Score=0.9! Score=423 esv271720  | 4 | 40000 gain    | AAAB | -1      |
| Score=0.9! Score=241 nsv7182,e: | 3 | 30000 gain    | AAB  | 87.2075 |
| Score=0.9! Score=273 dgv117e1,1 | 3 | 40000 gain    | AAB  | -1      |
| . Score=533 esv265858           | 3 | 20000 gain    | AAA  | 100     |
| Score=0.9! Score=507 nsv428246  | 3 | 70000 gain    | AAB  | 100     |
| Score=0.9! Score=192 nsv428246  | 3 | 60000 gain    | AAB  | -1      |
| Score=0.9! Score=113 dgv537n71  | 1 | 220000 loss   | A    | 28.1882 |
| . Score=184 esv272428           | 1 | 70000 loss    | A    | -1      |
| . Score=108 nsv834543           | 4 | 130000 gain   | AABB | 16.5094 |
| Score=0.9! Score=133 nsv520203  | 4 | 140000 gain   | AABB | 14.8115 |
| Score=0.9! Score=114 dgv922e1E  | 3 | 10000 gain    | -1   | -1      |
| Score=0.9! Score=381 esv272713  | 3 | 160000 gain   | AAA  | 1.98731 |
| . Score=492.                    | 1 | 80000 loss    | A    | 54.5738 |
| . Score=980 nsv4239             | 1 | 50000 loss    | A    | -1      |
| Score=0.9! Score=219 esv23426,1 | 1 | 174276 loss   | A    | -1      |
| Score=0.9! Score=252 esv147606  | 3 | 170000 gain   | AAB  | 14.8928 |
| Score=0.9! Score=668 esv272974  | 3 | 28320000 gain | AAA  | -1      |
| . Score=642 dgv1789e1           | 4 | 130000 gain   | AABB | 9.48625 |
| Score=0.9! Score=510 esv265790  | 3 | 13410000 gain | AAB  | 3.32473 |
| Score=0.9! Score=429 nsv525347  | 4 | 420000 gain   | AABB | 6.55705 |
| Score=0.9! Score=789 esv266401  | 4 | 200000 gain   | AABB | -1      |
| Score=0.9! Score=251 dgv6441n7  | 3 | 490000 gain   | AAB  | 100     |
| . Score=634 nsv823665           | 4 | 140000 gain   | AABB | 3.17938 |
| . Score=127 nsv5371             | 1 | 30000 loss    | -1   | -1      |
| Score=0.9! Score=238 nsv5567,e: | 3 | 50000 gain    | AAA  | 7.90423 |
| Score=0.9! Score=113 nsv830894  | 3 | 510000 gain   | AAB  | 68.1946 |

|                                 |   |             |      |         |
|---------------------------------|---|-------------|------|---------|
| . Score=278 esv158407           | 1 | 10000 loss  | A    | 100     |
| Score=0.9! Score=270 esv100554  | 1 | 260000 loss | A    | -1      |
| Score=0.9! Score=121 esv33253,1 | 3 | 200000 gain | AAB  | 6.44546 |
| Score=0.9! Score=328 esv273655  | 1 | 270000 loss | A    | 80.3384 |
| . Score=444 nsv831293           | 4 | 50000 gain  |      | -1 -1   |
| . Score=219 nsv527334           | 1 | 210000 loss | A    | 75.7586 |
| Score=0.9! Score=916 .          | 1 | 20000 loss  | A    | 100     |
| Score=0.8! Score=273 esv22308,1 | 1 | 660000 loss | A    | -1      |
| Score=0.9! Score=192 nsv820555  | 1 | 290000 loss | A    | 7.60458 |
| . Score=318 nsv527751           | 1 | 10000 loss  |      | -1 -1   |
| . Score=150 esv273807           | 1 | 90000 loss  | A    | 45.5097 |
| . Score=239 dgv1296e2           | 1 | 20000 loss  | A    | -1      |
| . Score=562 esv257175           | 4 | 180000 gain | AABB | 3.17343 |
| . Score=819 dgv8413n7           | 1 | 40000 loss  | A    | 100     |
| Score=0.9! Score=283 esv163799  | 3 | 900000 gain | AAB  | 21.1497 |
| . Score=108 esv267007           | 3 | 130000 gain | AAB  | 3.0607  |
| . Score=233 dgv385e19           | 3 | 40000 gain  | AAA  | 100     |
| . Score=262 .                   | 3 | 60000 gain  | AAA  | -1      |
| . Score=847 nsv7249,n           | 4 | 150000 gain | AABB | 4.85282 |
| . Score=273 .                   | 3 | 90000 gain  | AAB  | 95.6719 |
| Score=0.9! Score=374 nsv1613,e  | 3 | 50000 gain  | AAB  | 8.28201 |
| . Score=256 nsv442384           | 3 | 20000 gain  | AAA  | 100     |
| Score=0.9! Score=260 nsv521896  | 3 | 10000 gain  | AAB  | 96.4156 |
| . Score=267 esv275519           | 3 | 20000 gain  | AAA  | 100     |
| Score=0.9! Score=796 nsv9426,n  | 3 | 170000 gain | AAA  | 86.678  |
| Score=0.9! Score=803 nsv9431,d  | 3 | 150000 gain | AAA  | 100     |
| Score=0.9! Score=358 dgv847e1,1 | 3 | 30000 gain  | AAA  | -1      |
| Score=0.9! Score=253 nsv7285,n  | 3 | 100000 gain | AAA  | 26.3026 |
| . Score=439 esv21587,1          | 1 | 60000 loss  | A    | -1      |
| Score=0.9! Score=961 nsv9705,n  | 3 | 240000 gain | AAB  | 3.33038 |
| Score=0.9! Score=303 esv266146  | 3 | 50000 gain  | AAB  | 100     |
| . Score=270 nsv180652           | 3 | 20000 gain  | AAA  | 6.60573 |
| . Score=771 esv272238           | 3 | 160000 gain | AAA  | 55.3167 |
| . Score=817 dgv510n27           | 3 | 140000 gain | AAA  | -1      |
| Score=0.9! Score=976 nsv471490  | 1 | 360000 loss | A    | 3.31062 |

|                                 |   |               |      |          |
|---------------------------------|---|---------------|------|----------|
| Score=0.9; Score=656 esv272406  | 1 | 20000 loss    | A    | -1       |
| Score=0.9; Score=167 nsv817991  | 3 | 580000 gain   | AAB  | 60.331   |
| Score=0.9; Score=453 esv266719  | 1 | 6470000 loss  | A    | -1       |
| Score=0.9; Score=554 esv260613  | 3 | 54040000 gain | AAA  | -1       |
| Score=0.9; Score=268 esv2796,n  | 3 | 2120000 gain  | AAB  | 0.791925 |
| Score=0.9; Score=456 nsv819563  | 3 | 17260000 gain | AAA  | -1       |
| . Score=264 esv266010           | 3 | 50000 gain    | AAA  | 100      |
| Score=0.9; Score=468 nsv527241  | 3 | 38400000 gain | AAA  | -1       |
| Score=0.9; Score=267 nsv834303  | 3 | 150000 gain   | AAB  | 34.6755  |
| Score=0.9; Score=269 dgv1229e1  | 3 | 430000 gain   | AAB  | 28.4753  |
| Score=0.9; Score=403 esv267770  | 3 | 270000 gain   | AAA  | 36.3816  |
| Score=0.9; Score=144 esv266200  | 3 | 160000 gain   | AAA  | -1       |
| Score=0.9; Score=300 nsv10134,u | 3 | 1720000 gain  | AAB  | 3.83068  |
| Score=0.9; Score=438 esv32911,u | 3 | 21950000 gain | AAA  | -1       |
| . Score=232 nsv875344           | 3 | 130000 gain   | AAA  | 100      |
| . Score=707 nsv875345           | 3 | 30000 gain    | AAA  | -1       |
| Score=0.9; Score=460 nsv459989  | 4 | 1680000 gain  | AABB | 100      |
| . Score=458 nsv524548           | 3 | 40000 gain    | AAA  | 100      |
| . Score=786 esv100423           | 3 | 210000 gain   | AAA  | -1       |
| Score=0.9; Score=443 nsv876460  | 3 | 7790000 gain  | AAA  | -1       |
| Score=0.9; Score=642 esv996170  | 3 | 22860000 gain | AAA  | -1       |
| Score=0.9; Score=470 nsv822151  | 3 | 46570000 gain | AAA  | -1       |
| . Score=600 nsv460787           | 3 | 20000 gain    | AAA  | 100      |
| . Score=507 dgv183e55           | 3 | 50000 gain    | AAA  | -1       |
| Score=0.9; Score=442 esv204094  | 3 | 2350000 gain  | AAA  | -1       |
| Score=0.9; Score=152 nsv4192,n  | 3 | 50000 gain    | AAB  | -1       |
| Score=0.9; Score=241 nsv516451  | 3 | 240000 gain   | AAB  | 6.70249  |
| Score=0.9; Score=164 dgv5386n7  | 3 | 70000 gain    | AAB  | -1       |
| Score=0.9; Score=217 nsv461144  | 3 | 80000 gain    | AAA  | 18.1897  |
| . Score=267 nsv522680           | 3 | 10000 gain    |      | -1 -1    |
| Score=0.9; Score=295 nsv527745  | 3 | 7280000 gain  | AAA  | -1       |
| Score=0.9; Score=117 nsv819190  | 3 | 120000 gain   |      | -1 -1    |
| . Score=315 nsv10486            | 3 | 20000 gain    |      | -1 -1    |
| Score=0.9; Score=228 dgv5530n7  | 3 | 40000 gain    | AAB  | 100      |
| . Score=110 nsv878960           | 3 | 80000 gain    | AAB  | -1       |

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|---------------------------------|---|---------------|------|---------|
| . Score=233 esv249861           | 3 | 120000 gain   | AAA  | 80.6793 |
| . Score=239 nsv509895           | 3 | 80000 gain    | AAA  | -1      |
| . Score=342 nsv829925           | 3 | 20000 gain    | AAA  | 73.0136 |
| Score=0.9! Score=222 dgv658n27  | 3 | 120000 gain   | AAB  | 18.5294 |
| Score=0.9! Score=278 nsv470043  | 3 | 110000 gain   | AAB  | -1      |
| Score=0.9! Score=268 dgv5581n7  | 3 | 410000 gain   |      | -1 -1   |
| . Score=135 nsv4381,n:          | 3 | 90000 gain    | AAA  | 80.6793 |
| . Score=107 esv272803           | 3 | 170000 gain   | AAA  | 100     |
| Score=0.9! Score=485 nsv7363,n: | 3 | 130000 gain   | AAA  | -1      |
| . Score=348 nsv7363             | 3 | 30000 gain    |      | -1 -1   |
| Score=0.9! Score=486 esv272785  | 3 | 710000 gain   | AAB  | 62.8971 |
| Score=0.9! Score=485 esv267564  | 3 | 10200000 gain | AAA  | -1      |
| . Score=521 .                   | 3 | 20000 gain    | AAA  | 100     |
| Score=0.9! Score=248 esv272340  | 3 | 340000 gain   | AAA  | 100     |
| . Score=228 nsv290561           | 3 | 60000 gain    | AAA  | -1      |
| Score=0.9! Score=439 nsv509924  | 3 | 7450000 gain  | AAA  | -1      |
| . Score=276 nsv879854           | 3 | 1140000 gain  |      | -1 -1   |
| Score=0.9! Score=295 nsv528104  | 4 | 1620000 gain  | AABB | 4.39222 |
| . Score=166 nsv879867           | 4 | 80000 gain    | AABB | -1      |
| . Score=233 nsv879867           | 3 | 10000 gain    |      | -1 -1   |
| . Score=302 .                   | 3 | 10000 gain    |      | -1 -1   |
| Score=0.9! Score=270 esv272847  | 3 | 300000 gain   |      | -1 -1   |
| Score=0.9! Score=288 nsv289607  | 3 | 4980000 gain  | AAA  | -1      |
| . Score=230 dgv1700e1           | 3 | 20000 gain    | AAA  | 100     |
| . Score=564 .                   | 3 | 10000 gain    |      | -1 -1   |
| . Score=211 esv272871           | 3 | 210000 gain   | AAA  | 100     |
| . Score=222 nsv881291           | 3 | 10000 gain    | AAA  | -1      |
| . Score=498 nsv4601,n:          | 3 | 20000 gain    | AAA  | 100     |
| . Score=119 nsv822850           | 3 | 10000 gain    |      | -1 -1   |
| Score=0.9! Score=234 dgv5873n7  | 3 | 160000 gain   | AAA  | 5.54674 |
| Score=0.9! Score=219 nsv10641,c | 3 | 134276 gain   | AAA  | -1      |
| Score=0.9! Score=510 nsv4804,n: | 3 | 32620000 gain | AAA  | -1      |
| Score=0.9! Score=700 nsv882271  | 3 | 60300000 gain | AAA  | -1      |
| Score=0.9! Score=273 nsv830552  | 3 | 590000 gain   | AAA  | 100     |
| Score=0.8! Score=135 nsv883455  | 3 | 180000 gain   | AAA  | 12.1314 |

|                                 |   |               |      |          |
|---------------------------------|---|---------------|------|----------|
| . Score=568 esv267121           | 4 | 120000 gain   | AABB | 11.3155  |
| Score=0.9! Score=419 dgv1052e2  | 3 | 11640000 gain | AAA  | -1       |
| Score=0.9! Score=266 dgv1053e2  | 4 | 1140000 gain  | AABB | 100      |
| Score=0.9! Score=650 esv273516  | 3 | 25170000 gain | AAA  | -1       |
| Score=0.9! Score=262 esv267176  | 3 | 280000 gain   | AAA  | 81.7294  |
| . Score=285 esv23341,6          | 3 | 130000 gain   | AAA  | -1       |
| Score=0.9! Score=523 nsv886546  | 3 | 29360000 gain | AAA  | -1       |
| Score=0.9! Score=451 nsv520992  | 3 | 10900000 gain | AAA  | -1       |
| Score=0.9! Score=261 nsv5880,e  | 3 | 190000 gain   | AAB  | 31.6192  |
| Score=0.9! Score=533 nsv889060  | 3 | 17780000 gain | AAA  | -1       |
| Score=0.9! Score=255 esv273689  | 3 | 830000 gain   | AAB  | 84.0358  |
| Score=0.9! Score=660 esv3679,n  | 3 | 37440000 gain | AAA  | -1       |
| Score=0.9! Score=446 nsv831394  | 3 | 7320000 gain  | AAA  | -1       |
| . . .                           | 3 | 10000 gain    | AAB  | -1       |
| Score=0.9! Score=275 esv266845  | 3 | 170000 gain   | AAB  | 5.10012  |
| Score=0.9! Score=413 dgv1321e1  | 3 | 12920000 gain | AAA  | -1       |
| . Score=143 esv242221           | 3 | 160000 gain   | AAB  | 58.6855  |
| Score=0.9! Score=685 nsv892759  | 3 | 19250000 gain | AAA  | -1       |
| Score=0.9! Score=276 esv23416,6 | 4 | 360000 gain   | AAAB | 28.7068  |
| Score=0.9! Score=245 dgv8208n7  | 3 | 1660000 gain  | AAB  | 3.64829  |
| Score=0.9! Score=282 esv273850  | 3 | 3170000 gain  | AAB  | 1.00653  |
| Score=0.9! Score=281 esv101910  | 3 | 330000 gain   | AAB  | 100      |
| Score=0.9! Score=412 nsv893655  | 3 | 10020000 gain | AAA  | -1       |
| Score=0.9! Score=310 esv3464,n  | 3 | 7130000 gain  | AAA  | -1       |
| Score=0.9! Score=602 nsv24936,1 | 3 | 7140000 gain  | AAA  | -1       |
| . Score=929 essv75,nsv          | 3 | 30000 gain    |      | -1 -1    |
| Score=0.9! Score=748 nsv514557  | 3 | 200000 gain   | AAB  | 100      |
| Score=0.9! Score=449 esv265646  | 3 | 17420000 gain | AAA  | -1       |
| Score=0.9! Score=510 dgv200n67  | 3 | 23590000 gain | AAA  | -1       |
| Score=0.9! Score=328 esv275439  | 3 | 6350000 gain  | AAA  | -1       |
| Score=0.9! Score=598 esv274550  | 3 | 490000 gain   | AAB  | 20.302   |
| Score=0.9! Score=417 esv251215  | 3 | 170000 gain   | AAB  | -1       |
| Score=0.9! Score=274 nsv527404  | 3 | 770000 gain   | AAB  | 3.88904  |
| Score=0.9! Score=402 nsv898865  | 3 | 9460000 gain  | AAB  | 0.576937 |
| Score=0.9! Score=287 nsv826356  | 3 | 880000 gain   |      | -1 -1    |

|                                 |   |               |      |         |
|---------------------------------|---|---------------|------|---------|
| Score=0.9† Score=651 nsv805,esv | 3 | 49160000 gain | AAA  | -1      |
| Score=0.9† Score=275 esv268414  | 3 | 5540000 gain  | AAA  | -1      |
| . Score=152 nsv832657           | 4 | 40000 gain    | AABB | 43.4011 |
| . Score=264 nsv507726           | 3 | 370000 gain   | AAB  | 100     |
| Score=0.9† Score=360 dgv612e1,1 | 3 | 10010000 gain | AAA  | -1      |
| Score=0.9† Score=984 esv267568  | 3 | 200000 gain   | AAA  | 100     |
| Score=0.9† Score=436 esv7179,n  | 3 | 14770000 gain | AAA  | -1      |
| . Score=777 nsv1358,e           | 3 | 80000 gain    | AAB  | 16.0097 |
| Score=0.9† Score=479 nsv819254  | 3 | 11480000 gain | AAA  | -1      |
| . Score=627 nsv902241           | 4 | 70000 gain    | AABB | 2.96889 |
| . Score=920 nsv471683           | 3 | 20000 gain    | AAA  | 100     |
| . Score=226 esv100630           | 3 | 50000 gain    | AAA  | -1      |
| Score=0.9† Score=476 esv267423  | 3 | 14700000 gain | AAA  | -1      |
| Score=0.9† Score=424 nsv9504,n  | 3 | 80000 gain    | AAA  | 15.324  |
| Score=0.9† Score=683 esv104146  | 3 | 50000 gain    | AAA  | -1      |
| Score=0.9† Score=389 dgv70e19,1 | 3 | 6620000 gain  | AAB  | 57.6394 |
| . Score=254 esv100839           | 3 | 190000 gain   | AAB  | -1      |
| Score=0.9† Score=365 esv265117  | 3 | 9600000 gain  | AAA  | -1      |
| Score=0.9† Score=551 nsv511620  | 3 | 1580000 gain  | AAB  | 14.8447 |
| . Score=278 nsv458852           | 1 | 20000 loss    |      | -1 -1   |
| . Score=254 .                   | 3 | 20000 gain    | AAA  | 100     |
| . Score=999 dgv4583n7           | 4 | 110000 gain   | AABB | 100     |
| . Score=360 nsv509793           | 3 | 150000 gain   | AAB  | 100     |
| Score=0.9† Score=789 esv242229  | 3 | 230000 gain   | AAB  | 1.99044 |
| Score=0.9† Score=623 esv271943  | 1 | 87140000 loss | A    | -1      |
| Score=0.9† Score=645 nsv514129  | 3 | 240000 gain   |      | -1 -1   |
| . Score=121 esv275269           | 4 | 20000 gain    | AAAB | 100     |
| Score=0.9† Score=405 nsv830036  | 4 | 20000 gain    | AABB | 100     |
| Score=0.9† Score=480 nsv881270  | 4 | 2310000 gain  | AABB | 27.7768 |
| . Score=645 esv273095           | 1 | 30000 loss    | A    | 100     |
| . Score=804 esv273095           | 1 | 70000 loss    | A    | -1      |
| . Score=102 .                   | 3 | 50000 gain    |      | -1 -1   |
| Score=0.9† Score=221 dgv1355n7  | 1 | 290000 loss   | A    | 100     |
| Score=0.9† Score=932 nsv433419  | 1 | 30000 loss    | A    | -1      |
| . Score=732 nsv7246             | 4 | 20000 gain    | AABB | 100     |

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|---------------------------------|---|---------------|---------|----------|
| . Score=762 nsv901522           | 3 | 160000 gain   | AAB     | 100      |
| . Score=658 nsv832862           | 4 | 10000 gain    |         | -1 -1    |
| . Score=637 nsv9170,n           | 3 | 30000 gain    | AAB     | 100      |
| Score=0.9! Score=281 nsv903831  | 1 | 730000 loss   | A       | 4.77996  |
| Score=0.9! Score=281 nsv903975  | 1 | 450000 loss   | A       | 5.51424  |
| . Score=383 .                   | 3 | 10000 gain    |         | -1 -1    |
| . Score=404 .                   | 3 | 20000 gain    | AAB     | -1       |
| Score=0.9! Score=199 nsv94945,t | 3 | 90000 gain    | AAB     | 11.205   |
| . Score=271 esv164372           | 3 | 20000 gain    | AAB     | -1       |
| Score=0.9! Score=274 nsv510669  | 1 | 480000 loss   | A       | 23.101   |
| Score=0.9! Score=141 dgv764e1,u | 1 | 150000 loss   | A       | -1       |
| Score=0.9! Score=265 dgv766e1,u | 1 | 230000 loss   | A       | 29.4137  |
| Score=0.9! Score=275 nsv469708  | 6 | 10000 gain    | AAAAAA  | 18.536   |
| . Score=285 .                   | 4 | 10000 gain    |         | -1 -1    |
| Score=0.9! Score=235 esv991017  | 1 | 5950000 loss  | A       | -1       |
| Score=0.9! Score=511 esv272301  | 4 | 10000 gain    | AABB    | 100      |
| Score=0.9! Score=463 nsv520612  | 3 | 22840000 gain | AAA     | -1       |
| Score=0.9! Score=453 nsv525602  | 4 | 1320000 gain  | AABB    | 18.0486  |
| Score=0.9! Score=560 nsv829366  | 3 | 11240000 gain | AAA     | -1       |
| Score=0.9! Score=660 nsv527767  | 3 | 3650000 gain  | AAB     | 8.00259  |
| Score=0.9! Score=631 dgv150n71  | 3 | 10000 gain    | AAB     | 7.67682  |
| Score=0.9! Score=201 esv28644,u | 3 | 20000 gain    | AAB     | -1       |
| Score=0.9! Score=232 dgv169n71  | 3 | 840000 gain   | AAB     | 1.55138  |
| Score=0.9! Score=269 nsv871685  | 3 | 130000 gain   |         | -1 -1    |
| Score=0.9! Score=376 nsv437971  | 4 | 470000 gain   | AABB    | 5.81909  |
| Score=0.9! Score=167 nsv831215  | 4 | 130000 gain   | AABB    | -1       |
| Score=0.9! Score=288 esv9701,e  | 3 | 27290000 gain | AAB     | 0.211117 |
| Score=0.9! Score=120 esv275080  | 3 | 140000 gain   | AAB     | -1       |
| Score=0.9! Score=268 nsv160066  | 3 | 1880000 gain  | AAB     | 3.5166   |
| Score=0.9! Score=273 nsv831525  | 3 | 40000 gain    | AAB     | -1       |
| Score=0.9! Score=385 esv266198  | 3 | 1790000 gain  | AAA     | -1       |
| Score=0.9! Score=676 nsv3143,e  | 7 | 10000 gain    | AAAABBB | 51.695   |
| Score=0.9! Score=425 esv272678  | 3 | 4600000 gain  | AAB     | 2.75933  |
| Score=0.9! Score=195 esv272030  | 3 | 1210000 gain  | AAB     | 6.08566  |
| . Score=662 dgv61n16,u          | 3 | 30000 gain    | AAB     | -1       |



|                                 |   |               |        |          |
|---------------------------------|---|---------------|--------|----------|
| Score=0.9† Score=134 dgv645n67  | 3 | 10000 gain    | AAB    | -1       |
| Score=0.9† Score=320 nsv874619  | 3 | 6200000 gain  | AAB    | 2.37073  |
| Score=0.9† Score=441 essv23304  | 3 | 10000 gain    | AAB    | -1       |
| Score=0.9† Score=139 nsv2872    | 3 | 110000 gain   | AAA    | 54.6576  |
| . Score=144 nsv508854           | 3 | 70000 gain    | AAA    | -1       |
| Score=0.9† Score=438 nsv441785  | 3 | 28160000 gain | AAA    | -1       |
| Score=0.8† Score=149 nsv875407  | 3 | 330000 gain   | AAB    | 31.7779  |
| Score=0.9† Score=499 nsv528929  | 3 | 7410000 gain  | AAA    | -1       |
| Score=0.9† Score=262 esv192612  | 4 | 990000 gain   | AABB   | 5.91581  |
| Score=0.9† Score=404 esv272152  | 3 | 12590000 gain | AAA    | -1       |
| Score=0.9† Score=442 esv272520  | 3 | 3020000 gain  | AAA    | -1       |
| . Score=237 nsv236202           | 3 | 600000 gain   | AAB    | 50.1841  |
| . Score=117 esv272522           | 3 | 110000 gain   | AAB    | -1       |
| . Score=119 nsv834701           | 3 | 240000 gain   | AAA    | 100      |
| . Score=325 esv266521           | 3 | 140000 gain   | AAA    | -1       |
| . Score=904 esv266947           | 3 | 60000 gain    | -1     | -1       |
| Score=0.9† Score=177 esv266347  | 3 | 210000 gain   | AAB    | 7.56032  |
| Score=0.9† Score=212 esv272589  | 3 | 1040000 gain  | AAB    | 1.80726  |
| . Score=673 dgv5254n7           | 5 | 40000 gain    | AAABB  | -1       |
| Score=0.9† Score=632 esv274484  | 5 | 63700000 gain | AAABB  | 0.731165 |
| . Score=168 nsv437908           | 6 | 210000 gain   | AAAABB | 14.1377  |
| . Score=495 esv172712           | 3 | 30000 gain    | AAB    | -1       |
| Score=0.9† Score=443 esv273412  | 3 | 2420000 gain  | AAB    | 1.40044  |
| Score=0.9† Score=758 nsv10385,u | 3 | 20000 gain    | AAB    | -1       |
| Score=0.9† Score=289 esv272662  | 5 | 2020000 gain  | AAABB  | 1.57407  |
| Score=0.9† Score=786 dgv5381n7  | 5 | 70000 gain    | AAABB  | -1       |
| Score=0.9† Score=113 nsv508984  | 3 | 120000 gain   | AAA    | 21.2368  |
| Score=0.9† Score=571 esv26652,u | 3 | 62430 gain    | AAA    | -1       |
| Score=0.9† Score=829 dgv1570e1  | 3 | 110000 gain   | AAA    | 2.09064  |
| . Score=107 esv272803           | 3 | 220000 gain   | AAA    | 80.6793  |
| Score=0.9† Score=486 esv272787  | 3 | 7000000 gain  | AAA    | -1       |
| . Score=817 esv266806           | 3 | 170000 gain   | AAA    | 73.6761  |
| . Score=321 esv266311           | 3 | 300000 gain   | AAA    | -1       |
| Score=0.9† Score=273 nsv879915  | 3 | 150000 gain   | AAA    | 100      |
| . Score=285 nsv292163           | 3 | 980000 gain   | -1     | -1       |



|                                 |   |              |        |         |
|---------------------------------|---|--------------|--------|---------|
| . Score=543 nsv831732           | 3 | 160000 gain  | AAA    | 80.6793 |
| Score=0.9( Score=239 esv267046  | 3 | 1590000 gain | AAB    | 2.14333 |
| . Score=400 nsv519701           | 3 | 60000 gain   | AAB    | -1      |
| Score=0.9( Score=654 nsv516555  | 4 | 260000 gain  | AABB   | 24.4739 |
| . Score=234 nsv528140           | 6 | 10000 gain   | AAABBB | 74.585  |
| Score=0.9( Score=245 esv266073  | 4 | 30000 gain   | AABB   | 10.7153 |
| Score=0.9( Score=224 dgv910n71  | 3 | 80000 gain   | AAB    | -1      |
| Score=0.9( Score=224 esv22231,1 | 3 | 60000 gain   | AAB    | 58.7147 |
| Score=0.9( Score=104 esv266303  | 3 | 340000 gain  | AAB    | 74.6732 |
| Score=0.9( Score=313 nsv897028  | 3 | 130000 gain  | AAB    | -1      |
| . Score=276 nsv897625           | 3 | 320000 gain  | -1     | -1      |
| Score=0.9( Score=261 nsv349,ns  | 3 | 350000 gain  | AAB    | 100     |
| . Score=223 esv242241           | 4 | 200000 gain  | AABB   | 54.4751 |
| Score=0.9( Score=947 nsv516638  | 3 | 120000 gain  | AAB    | 77.9109 |
| Score=0.9( Score=120 esv33345,1 | 3 | 320000 gain  | AAB    | -1      |
| Score=0.9( Score=260 dgv179n27  | 4 | 540000 gain  | AABB   | 10.589  |
| Score=0.9( Score=404 esv158346  | 3 | 540000 gain  | AAB    | 8.83875 |
| . Score=148 esv266193           | 3 | 150000 gain  | AAB    | -1      |
| . Score=720 esv143399           | 3 | 140000 gain  | AAA    | 100     |
| . Score=552 esv34039            | 3 | 30000 gain   | AAA    | -1      |
| Score=0.9( Score=249 esv275239  | 3 | 690000 gain  | AAB    | 24.4642 |
| Score=0.9( Score=276 esv274705  | 3 | 860000 gain  | AAB    | 6.31397 |
| . Score=235 esv268973           | 3 | 10000 gain   | AAB    | -1      |
| Score=0.9( Score=245 esv5325,es | 3 | 150000 gain  | AAB    | 12.669  |
| Score=0.9( Score=372 esv275113  | 3 | 30000 gain   | AAB    | 9.1331  |
| . Score=577 esv123251           | 4 | 90000 gain   | AABB   | 7.37222 |
| Score=0.9( Score=128 nsv525459  | 3 | 160000 gain  | AAB    | 100     |
| . Score=739 nsv64676,1          | 3 | 60000 gain   | AAB    | -1      |
| . Score=274 esv274724           | 5 | 30000 gain   | AAABB  | 96.6605 |
| . Score=131 esv265900           | 3 | 210000 gain  | -1     | -1      |
| . Score=222 esv33246            | 3 | 10000 gain   | AAA    | 73.0136 |
| Score=0.9( Score=267 esv266653  | 3 | 830000 gain  | AAB    | 24.0729 |
| . Score=239 nsv820041           | 3 | 80000 gain   | AAB    | 31.4844 |
| Score=0.9( Score=461 esv266793  | 3 | 7220000 gain | -1     | -1      |
| . Score=237 nsv820122           | 3 | 10000 gain   | AAA    | 100     |

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|---------------------------------|---|---------------|-------|----------|
| Score=0.9! Score=434 esv274780  | 3 | 28800000 gain | AAA   | -1       |
| Score=0.9! Score=263 nsv901215  | 3 | 1240000 gain  | AAB   | 0.999551 |
| Score=0.9! Score=433 esv274845  | 4 | 80000 gain    | AABB  | 40.9549  |
| Score=0.9! Score=479 esv267118  | 3 | 61100000 gain | AAA   | -1       |
| Score=0.9! Score=263 dgv2076n7  | 3 | 20160000 gain | AAB   | -1       |
| Score=1;!N Score=270 dgv2195n7  | 3 | 3220000 gain  | AAB   | 0.585623 |
| . Score=273 .                   | 4 | 100000 gain   | AAAB  | 100      |
| Score=0.9! Score=170 nsv905370  | 3 | 540000 gain   | AAB   | 3.04855  |
| Score=0.9! Score=295 nsv509600  | 3 | 2270000 gain  | AAB   | 4.0923   |
| Score=0.9! Score=242 esv258249  | 3 | 520000 gain   | AAA   | 20.0517  |
| . Score=234 nsv457444           | 3 | 20000 gain    | AAA   | -1       |
| Score=0.9! Score=319 nsv436835  | 3 | 890000 gain   | AAB   | 4.93729  |
| . Score=128 esv998989           | 3 | 10000 gain    | AAB   | -1       |
| Score=0.9! Score=735 dgv834e1,! | 4 | 170000 gain   | AAAB  | 18.6372  |
| Score=0.9! Score=796 esv265877  | 3 | 230000 gain   | AAB   | 7.40663  |
| Score=0.9! Score=286 esv268722  | 3 | 320000 gain   | AAB   | 3.49193  |
| Score=0.9! Score=611 esv27528,! | 3 | 20000 gain    | AAB   | -1       |
| Score=0.9! Score=101 nsv908327  | 3 | 260000 gain   | AAB   | 14.4441  |
| Score=0.9! Score=697 dgv975e1,! | 3 | 250000 gain   | AAB   | 19.0072  |
| Score=0.9! Score=643 nsv908562  | 3 | 220000 gain   | AAB   | -1       |
| Score=0.9! Score=510 esv273661  | 3 | 9260000 gain  | AAA   | -1       |
| Score=0.9! Score=277 nsv909285  | 3 | 40000 gain    | AAB   | -1       |
| Score=0.9! Score=277 nsv909286  | 3 | 90000 gain    | AAB   | 6.93135  |
| Score=0.9! Score=132 nsv909285  | 3 | 60000 gain    | AAB   | -1       |
| . Score=258 nsv2228             | 3 | 20000 gain    | AAA   | 100      |
| Score=0.9! Score=442 esv230713  | 3 | 23000000 gain | AAA   | -1       |
| . Score=145 nsv510457           | 5 | 60000 gain    | AAABB | 100      |
| . . .                           | 3 | 60000 gain    | AAB   | -1       |
| Score=0.9! Score=224 nsv910081  | 3 | 240000 gain   | AAB   | 9.64635  |
| Score=0.9! Score=638 nsv911020  | 4 | 930000 gain   | AABB  | 2.56782  |
| Score=0.9! Score=106 esv275428  | 4 | 380000 gain   | AABB  | 6.48553  |
| Score=0.9! Score=278 nsv911819  | 4 | 990000 gain   | AABB  | 4.56473  |
| . Score=110 esv271881           | 3 | 20000 gain    | AAA   | 100      |
| Score=0.9! Score=294 esv268330  | 3 | 560000 gain   | AAB   | 1.43999  |
| . Score=270 dgv4507n7           | 3 | 120000 gain   | AAB   | -1       |

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|---------------------------------|---|---------------|---------|---------|
| Score=0.9† Score=463 nsv833898  | 3 | 310000 gain   | AAB     | 1.62352 |
| . Score=253 nsv528355           | 3 | 10000 gain    | AAB     | -1      |
| Score=0.9† Score=216 esv24766,1 | 5 | 400000 gain   | AAABB   | 10.4212 |
| . Score=222 dgv4521n7           | 5 | 10000 gain    | AAABB   | -1      |
| . Score=622 nsv912615           | 3 | 230000 gain   | AAB     | 55.9202 |
| . Score=348 dgv776e19           | 3 | 10000 gain    | AAB     | -1      |
| Score=0.9† Score=286 esv272212  | 3 | 13740000 gain | AAB     | 5.18667 |
| . Score=270 esv152139           | 3 | 30000 gain    | AAA     | 12.1589 |
| . Score=242 .                   | 4 | 50000 gain    | AABB    | -1      |
| Score=0.9† Score=294 nsv912811  | 4 | 3450000 gain  | AABB    | 17.3108 |
| . Score=150 esv267044           | 3 | 30000 gain    | AAB     | -1      |
| Score=0.9† Score=462 nsv510784  | 3 | 4870000 gain  | AAB     | 5.34341 |
| Score=0.9† Score=274 esv25843,1 | 3 | 5250000 gain  | AAB     | 8.95248 |
| . Score=266 nsv833956           | 3 | 10000 gain    | AAB     | -1      |
| . Score=905 esv255213           | 6 | 10000 gain    | AAAABB  | 4.15705 |
| . Score=242 nsv512611           | 3 | 10000 gain    | AAB     | -1      |
| Score=0.9† Score=235 esv223499  | 3 | 3130000 gain  | AAB     | 2.14461 |
| Score=0.9† Score=259 nsv3367,n  | 3 | 20000 gain    | AAB     | -1      |
| . Score=244 nsv526188           | 7 | 10000 gain    | AAAAABB | 100     |
| . Score=248 nsv526188           | 3 | 10000 gain    | AAB     | -1      |
| Score=0.9† Score=935 esv272237  | 3 | 1040000 gain  | AAB     | 2.29134 |
| Score=0.9† Score=112 nsv178626  | 5 | 310000 gain   | AAABB   | 5.74584 |
| Score=0.9† Score=287 nsv9811,n  | 3 | 14570000 gain | AAB     | 0.81314 |
| . Score=373 esv272252           | 3 | 240000 gain   | AAB     | -1      |
| . Score=250 nsv912928           | 7 | 10000 gain    |         | -1      |
| . Score=436 nsv912928           | 3 | 30000 gain    | AAB     | -1      |
| Score=0.9† Score=283 nsv912928  | 3 | 4330000 gain  | AAB     | 4.83312 |
| . Score=330 nsv525425           | 3 | 10000 gain    | AAB     | -1      |
| . Score=146 esv29810,1          | 3 | 80000 gain    | AAA     | 96.2339 |
| . Score=460 esv272257           | 3 | 80000 gain    | AAA     | -1      |
| . Score=237 nsv834015           | 3 | 20000 gain    | AAB     | 100     |
| . Score=151 esv265975           | 3 | 520000 gain   | AAB     | -1      |
| Score=0.9† Score=340 esv272262  | 3 | 4340000 gain  | AAB     | 8.27479 |
| Score=0.9† Score=598 nsv9836,e  | 3 | 40000 gain    | AAB     | 43.0455 |
| Score=0.9† Score=125 nsv9836,e  | 3 | 65520 gain    | AAB     | -1      |

|                                   |    |               |         |          |
|-----------------------------------|----|---------------|---------|----------|
| Score=0.9; Score=263 esv272301    | 3  | 9750000 gain  | AAB     | -1       |
| Score=0.9; Score=274 esv272303    | 3  | 1350000 gain  | AAB     | 0.572513 |
| Score=0.9; Score=254 esv7291,esv  | 3  | 3310000 gain  | AAB     | -1       |
| . Score=242 nsv7346,nsv           | 3  | 10000 gain    |         | -1       |
| Score=0.9; Score=799 nsv469815    | 3  | 16090000 gain | AAB     | -1       |
| Score=0.9; Score=262 dgv772e2C    | 3  | 880000 gain   | AAB     | 7.60149  |
| Score=0.9; Score=253 esv25306,esv | 3  | 60000 gain    | AAB     | 36.6149  |
| Score=0.9; Score=400 esv25306     | 3  | 64566 gain    | AAB     | -1       |
| Score=0.9; Score=116 esv275232    | 4  | 210000 gain   | AABB    | 7.58168  |
| Score=0.9; Score=233 nsv469734    | 4  | 20000 gain    | AABB    | 28.3551  |
| Score=0.9; Score=233 nsv6897,nsv  | 3  | 190000 gain   | AAB     | 3.26537  |
| Score=0.9; Score=269 esv267875    | 3  | 440000 gain   | AAA     | 55.3104  |
| Score=1;N Score=430 esv266797     | 3  | 16730000 gain | AAA     | -1       |
| Score=0.9; Score=662 esv274045    | 3  | 17340000 gain | AAA     | -1       |
| Score=0.9; Score=247 esv153107    | 3  | 550000 gain   | AAB     | 32.9414  |
| Score=0.9; Score=662 nsv436632    | 3  | 1360000 gain  | AAB     | 30.7263  |
| Score=0.9; Score=162 nsv10003     | 3  | 10560 gain    | AAB     | -1       |
| . Score=458 esv266461             | 3  | 90000 gain    | AAB     | 20.2272  |
| . Score=237 nsv834435             | 3  | 20000 gain    |         | -1       |
| Score=0.9; Score=245 nsv10550,ns  | 3  | 250000 gain   | AAB     | 33.5651  |
| . Score=258 nsv873093             | 4  | 10000 gain    | AABB    | 100      |
| . Score=342 esv3940,nsv           | 3  | 110000 gain   | AAB     | 64.3991  |
| Score=0.9; Score=100 esv267470    | 3  | 210000 gain   | AAB     | 21.9586  |
| . Score=645 esv273095             | 3  | 20000 gain    | AAA     | 54.57    |
| . Score=804 esv266149             | 3  | 80000 gain    | AAA     | -1       |
| . Score=217 nsv499795             | 5  | 10000 gain    | AAABB   | 73.8733  |
| Score=0.9; Score=104 nsv519650    | 3  | 250000 gain   | AAB     | 6.43682  |
| . Score=377 esv270609             | 3  | 210000 gain   | AAB     | 100      |
| . Score=402 dgv6e196,esv          | 3  | 10000 gain    | AAB     | -1       |
| Score=0.9; Score=168 esv29743,esv | 3  | 360000 gain   | AAB     | 19.2092  |
| . Score=370 esv267170             | 4  | 40000 gain    | AAAB    | 100      |
| . Score=109 dgv69n68,esv          | 3  | 10000 gain    | AAB     | 12.5965  |
| . Score=292 .                     | 3  | 80000 gain    | AAB     | 35.5408  |
| Score=0.9; Score=100 esv266957    | 91 | 10000 gain    | AAAAAAA | 100      |
| Score=0.9; Score=350 dgv922e1E    | 7  | 30000 gain    | AAAAAAB | 100      |

|                                 |     |              |          |         |
|---------------------------------|-----|--------------|----------|---------|
| Score=0.9! Score=348 dgv922e1E  | 3   | 20000 gain   | AAA      | -1      |
| Score=0.9! Score=381 esv101094  | 3   | 80000 gain   | AAA      | 4.10631 |
| Score=0.9! Score=303 dgv1569e1  | 17  | 10000 gain   | AAAAAAA, | 100     |
| Score=0.9! Score=769 nsv471487  | 3   | 40000 gain   | AAA      | 4.57632 |
| Score=0.9! Score=219 nsv10641,t | 3   | 134276 gain  | AAA      | -1      |
| . Score=691 dgv6189n7           | 3   | 20000 gain   | -1       | -1      |
| . Score=876 nsv328622           | 3   | 240000 gain  | AAB      | 23.1518 |
| Score=0.9! Score=220 nsv8,nsv5f | 6   | 10000 gain   | AAAAAA   | 30.3547 |
| Score=0.9! Score=243 dgv2120e1  | 18  | 10000 gain   | AAAAAAA, | 87.1734 |
| . Score=216 nsv8926,n:          | 3   | 140000 gain  | AAB      | 7.56032 |
| Score=0.9! . esv266469          | 12  | 10000 gain   | AAAAAAB  | 14.3222 |
| Score=0.9! Score=275 dgv788e1,l | 5   | 10000 gain   | AAAAA    | 3.99866 |
| . Score=826 dgv4506n7           | 1   | 70000 loss   | -1       | -1      |
| Score=0.9! Score=378 esv272430  | 3   | 140000 gain  | AAB      | 28.8997 |
| Score=0.9! Score=279 nsv191166  | 3   | 2820000 gain | AAB      | 100     |
| Score=0.9! Score=100 esv271811  | 7   | 10000 gain   | AAAABBB  | 22.2976 |
| Score=0.9! Score=239 nsv832681  | 4   | 20000 gain   | AABB     | 100     |
| . Score=678 nsv526386           | 3   | 80000 gain   | AAB      | 47.9616 |
| . Score=366 nsv874956           | 3   | 20000 gain   | -1       | -1      |
| . Score=208 .                   | 4   | 10000 gain   | AABB     | 36.7053 |
| . Score=126 nsv875909           | 4   | 20000 gain   | AABB     | 100     |
| . Score=269 nsv524847           | 3   | 40000 gain   | AAB      | 100     |
| . Score=244 esv272749           | 4   | 20000 gain   | AABB     | 68.972  |
| Score=0.9! Score=769 nsv820863  | 4   | 40000 gain   | AAAB     | 21.2442 |
| Score=0.9! Score=219 nsv820863  | 4   | 134276 gain  | AAAB     | -1      |
| . Score=153 nsv882709           | 4   | 10000 gain   | -1       | -1      |
| Score=0.9! Score=223 esv581,ns\ | 3   | 110000 gain  | -1       | -1      |
| Score=0.9! Score=244 nsv824240  | 112 | 10000 gain   | AAAAAAA, | 100     |
| Score=0.9! Score=697 dgv7671n7  | 3   | 1830000 gain | AAB      | 1.11149 |
| Score=0.9! Score=192 nsv6284,n: | 3   | 290000 gain  | AAA      | 4.65699 |
| . Score=192 .                   | 4   | 10000 gain   | -1       | -1      |
| . Score=276 .                   | 4   | 20000 gain   | -1       | -1      |
| Score=0.9! Score=607 dgv8n64,d\ | 3   | 90000 gain   | AAB      | 5.7394  |
| . Score=265 .                   | 4   | 10000 gain   | AABB     | 100     |
| Score=0.9! Score=181 esv274925  | 6   | 10000 gain   | AAABBB   | 2.49043 |

|                                 |   |              |         |          |
|---------------------------------|---|--------------|---------|----------|
| . Score=913 esv265694           | 3 | 90000 gain   | -1      | -1       |
| Score=0.9! Score=275 dgv113e55  | 7 | 10000 gain   | AAAAAAA | 3.70457  |
| . Score=312 esv265888           | 4 | 10000 gain   | AABB    | 47.1736  |
| Score=0.9! Score=145 nsv906908  | 3 | 600000 gain  | AAB     | 16.2996  |
| Score=0.9! Score=206 esv210377  | 3 | 1680000 gain | AAB     | 11.4161  |
| Score=0.9! Score=277 esv143586  | 3 | 80000 gain   | AAB     | 9.36616  |
| . Score=273 esv258673           | 5 | 10000 gain   | -1      | -1       |
| . Score=129 nsv833615           | 5 | 10000 gain   | -1      | -1       |
| . Score=521 nsv909545           | 4 | 30000 gain   | AAAB    | 100      |
| Score=0.9! Score=129 nsv512551  | 3 | 520000 gain  | AAB     | 18.4463  |
| . Score=588 esv114874           | 3 | 340000 gain  | AAB     | 59.4207  |
| Score=0.9! Score=294 esv265751  | 1 | 120000 loss  | A       | 21.8288  |
| Score=0.9! Score=392 nsv9686,e  | 1 | 460000 loss  | A       | -1       |
| . Score=146 nsv828673           | 1 | 10000 loss   | -1      | -1       |
| Score=0.9! Score=123 dgv1322e1  | 3 | 10000 gain   | -1      | -1       |
| . Score=441 dgv519n27           | 4 | 10000 gain   | -1      | -1       |
| . Score=523 nsv7347             | 4 | 10000 gain   | AABB    | 33.7258  |
| Score=0.9! Score=452 nsv914231  | 3 | 280000 gain  | AAB     | 1.60347  |
| Score=0.9! Score=838 nsv436867  | 3 | 410000 gain  | AAB     | 3.8425   |
| Score=0.9! Score=351 nsv914393  | 3 | 10000 gain   | AAB     | -1       |
| Score=0.9! Score=976 nsv914437  | 3 | 280000 gain  | AAB     | 1.35125  |
| Score=0.9! Score=130 esv27639,u | 3 | 190000 gain  | AAB     | 100      |
| Score=0.9! Score=276 nsv471539  | 3 | 30000 gain   | AAB     | 14.5204  |
| Score=0.9! Score=201 nsv832869  | 3 | 20000 gain   | AAB     | -1       |
| Score=0.9! Score=232 dgv20e1,n  | 3 | 490000 gain  | AAB     | 3.40302  |
| Score=0.9! Score=232 dgv22e1,n  | 3 | 310000 gain  | AAB     | 6.47336  |
| Score=0.9! Score=501 nsv871961  | 3 | 7550000 gain | AAA     | -1       |
| Score=0.9! Score=220 nsv8003,d  | 4 | 690000 gain  | AAAB    | 22.9415  |
| Score=0.9! Score=107 dgv104e1,u | 4 | 100000 gain  | AAAB    | 6.50785  |
| Score=0.9! Score=287 dgv46e201  | 3 | 550000 gain  | AAB     | 6.0595   |
| Score=0.9! Score=268 nsv818422  | 3 | 1900000 gain | AAB     | 0.658195 |
| Score=0.9! Score=143 nsv428235  | 3 | 90000 gain   | AAB     | -1       |
| Score=0.9! Score=229 nsv428235  | 7 | 10000 gain   | AAAAABB | 50.5523  |
| Score=0.9! Score=385 nsv441714  | 3 | 2110000 gain | AAA     | -1       |
| Score=0.9! Score=204 dgv573n71  | 3 | 210000 gain  | AAA     | 4.8288   |



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|--------------------------------|---|---------------|--------|----------|
| Score=0.9† Score=268 dgv575n71 | 3 | 560000 gain   | AAB    | 15.5062  |
| Score=0.9† Score=162 .         | 3 | 40621 gain    | AAB    | -1       |
| . Score=226 esv168311          | 4 | 150000 gain   | AABB   | 21.6267  |
| . Score=467 nsv834507          | 5 | 10000 gain    |        | -1       |
| Score=0.9† Score=203 nsv834516 | 6 | 10000 gain    | AAAABB | 100      |
| Score=0.9† Score=632 esv267346 | 3 | 92680000 gain | AAA    | -1       |
| . Score=493 nsv878047          | 8 | 10000 gain    |        | -1       |
| Score=0.9† Score=238 esv273410 | 3 | 340000 gain   | AAB    | -1       |
| Score=0.9† Score=504 nsv509877 | 3 | 15450000 gain | AAB    | 0.478959 |
| Score=0.9† Score=571 dgv1562e1 | 3 | 62430 gain    | AAB    | -1       |
| . Score=106 nsv517266          | 4 | 20000 gain    | AABB   | 29.307   |
| . Score=252 esv222858          | 6 | 10000 gain    | AAAABB | 83.5582  |
| . Score=976 .                  | 4 | 20000 gain    | AABB   | 68.4669  |
| Score=0.9† Score=254 nsv830623 | 4 | 190000 gain   | AABB   | 9.58797  |
| . Score=779 nsv885792          | 5 | 60000 gain    | AAABB  | 100      |
| . Score=172 esv149335          | 3 | 110000 gain   | AAB    | 62.0865  |
| . Score=102 nsv5349            | 4 | 80000 gain    | AABB   | 100      |
| . Score=224 nsv830783          | 4 | 70000 gain    | AABB   | 14.5473  |
| Score=0.9† Score=291 nsv428155 | 4 | 330000 gain   | AABB   | 5.83793  |
| Score=0.9† Score=251 nsv366743 | 4 | 350000 gain   | AAAB   | 100      |
| Score=0.9† Score=275 esv273461 | 3 | 4610000 gain  | AAB    | 53.3505  |
| Score=0.9† Score=105 nsv482102 | 3 | 970000 gain   | AAB    | 3.58914  |
| . Score=253 esv22177,t         | 3 | 20000 gain    | AAA    | 36.379   |
| . Score=413 dgv7872n7          | 5 | 20000 gain    |        | -1       |
| Score=0.9† Score=272 nsv508589 | 3 | 2130000 gain  | AAA    | -1       |
| Score=0.9† Score=654 esv274193 | 4 | 280000 gain   | AAAB   | 100      |
| . Score=260 nsv522884          | 4 | 80000 gain    |        | -1       |
| Score=0.9† Score=193 nsv898435 | 3 | 480000 gain   | AAB    | 3.78482  |
| . Score=255 esv275109          | 5 | 20000 gain    | AAABB  | 13.0171  |
| . Score=260 esv274764          | 3 | 970000 gain   | AAB    | 15.9343  |
| . Score=250 .                  | 3 | 20000 gain    | AAB    | -1       |
| . Score=216 .                  | 5 | 10000 gain    | AAABB  | 100      |
| . Score=300 esv274874          | 6 | 10000 gain    |        | -1       |
| . Score=101 nsv517477          | 3 | 340000 gain   | AAB    | 19.7     |
| Score=0.9† Score=278 dgv2371n7 | 3 | 170000 gain   | AAB    | 17.4097  |

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|---------------------------------|---|--------------|-------|----------|
| . Score=228 esv271396           | 3 | 20000 gain   | AAA   | 100      |
| . Score=234 nsv1762,n           | 4 | 220000 gain  | AABB  | 9.39762  |
| Score=0.9! Score=224 nsv906545  | 3 | 150000 gain  | AAB   | 0.367671 |
| . Score=637 nsv833244           | 3 | 60000 gain   | AAB   | 9.03301  |
| . Score=233 nsv1846,n           | 4 | 180000 gain  | AABB  | 60.2008  |
| Score=0.9! Score=286 esv260390  | 3 | 290000 gain  | AAB   | 5.53685  |
| Score=0.9! Score=235 nsv1859,n  | 3 | 10000 gain   | AAB   | -1       |
| Score=0.9! Score=293 esv100279  | 3 | 1290000 gain | AAB   | 2.57139  |
| . Score=221 esv100571           | 4 | 20000 gain   | AABB  | 100      |
| Score=0.9! Score=244 nsv522008  | 3 | 10000 gain   |       | -1 -1    |
| . Score=201 nsv458949           | 3 | 10000 gain   |       | -1 -1    |
| . Score=636 esv992784           | 3 | 40000 gain   | AAA   | 100      |
| . Score=245.                    | 3 | 10000 gain   | AAA   | -1       |
| . Score=566.                    | 5 | 30000 gain   | AAABB | 100      |
| . Score=463 esv130196           | 3 | 80000 gain   | AAB   | 100      |
| Score=0.9! Score=226 nsv913657  | 4 | 470000 gain  | AABB  | 100      |
| . Score=119 nsv913716           | 3 | 130000 gain  | AAB   | 100      |
| . Score=742 nsv3505,e           | 3 | 30000 gain   | AAA   | 100      |
| . Score=242 nsv3505,e           | 3 | 10000 gain   | AAA   | -1       |
| . Score=106 esv33578            | 3 | 40000 gain   | AAB   | 17.2872  |
| . Score=222 esv272341           | 3 | 10000 gain   |       | -1 -1    |
| . Score=147 esv272404           | 4 | 20000 gain   | AABB  | 84.8236  |
| . Score=302 nsv817986           | 3 | 10000 gain   |       | -1 -1    |
| Score=0.9! Score=488 nsv428389  | 3 | 150000 gain  | AAA   | 100      |
| . Score=622 nsv524585           | 3 | 140000 gain  | AAA   | -1       |
| Score=0.9! Score=515 esv265949  | 3 | 6820000 gain | AAA   | -1       |
| . Score=366 nsv518704           | 4 | 20000 gain   | AAAB  | 100      |
| Score=0.9! Score=274 esv33289,i | 3 | 820000 gain  | AAA   | 9.18906  |
| . Score=271 nsv508920           | 3 | 30000 gain   |       | -1 -1    |
| . Score=631 nsv516703           | 3 | 20000 gain   | AAB   | 8.06487  |
| Score=0.9! Score=229 esv267819  | 3 | 10000 gain   | AAA   | 100      |
| . Score=316 nsv878947           | 3 | 30000 gain   | AAB   | 41.6544  |
| . Score=142.                    | 3 | 20000 gain   |       | -1 -1    |
| . Score=952 esv24873,i          | 3 | 110000 gain  |       | -1 -1    |
| Score=0.9! Score=232 nsv883468  | 3 | 840000 gain  | AAB   | 92.2585  |

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|---------------------------------|---|---------------|--------|---------|
| . Score=252 nsv884418           | 3 | 10000 gain    | AAB    | 8.5861  |
| Score=0.9: Score=189 nsv527079  | 3 | 930000 gain   | AAB    | 13.6491 |
| . Score=558 .                   | 3 | 20000 gain    |        | -1 -1   |
| Score=0.9: Score=416 nsv8483,d  | 4 | 10000 gain    | AABB   | 100     |
| . Score=219 nsv521672           | 3 | 130000 gain   | AAB    | 100     |
| Score=0.9: Score=233 dgv964n71  | 3 | 30000 gain    | AAA    | 58.7741 |
| . Score=117 dgv968n71           | 3 | 10000 gain    | AAA    | -1      |
| . Score=571 .                   | 4 | 10000 gain    |        | -1 -1   |
| Score=0.9: Score=777 dgv1361n7  | 3 | 190000 gain   | AAB    | 40.6964 |
| . Score=385 esv34052,c          | 3 | 20000 gain    | AAB    | 12.7274 |
| . Score=320 nsv64073,c          | 3 | 160000 gain   | AAB    | 21.0881 |
| . Score=878 esv274816           | 4 | 20000 gain    | AABB   | 66.0696 |
| Score=0.9: Score=360 esv22168,c | 1 | 2470000 loss  | A      | -1      |
| . Score=253 esv253668           | 3 | 20000 gain    | AAB    | 100     |
| Score=0.9: Score=637 esv24223,c | 3 | 30000 gain    | AAB    | 8.98935 |
| Score=0.9: Score=740 nsv910903  | 3 | 30000 gain    | AAB    | 66.8917 |
| . Score=300 nsv828463           | 3 | 10000 gain    |        | -1 -1   |
| Score=0.9: Score=921 esv175459  | 3 | 730000 gain   | AAA    | 43.4713 |
| . Score=242 .                   | 3 | 10000 gain    | AAA    | -1      |
| . Score=988 esv26419            | 3 | 120000 gain   | AAB    | 10.942  |
| . Score=241 nsv913744           | 3 | 10000 gain    | AAB    | 51.1179 |
| . Score=464 nsv913873           | 4 | 10000 gain    | AAAB   | 100     |
| . Score=445 .                   | 4 | 30000 gain    | AABB   | 65.9194 |
| Score=0.9: Score=389 nsv7013,n  | 3 | 400000 gain   | AAB    | 100     |
| Score=0.9: Score=294 esv274042  | 3 | 520000 gain   | AAB    | 37.2752 |
| Score=0.9: Score=217 esv274480  | 4 | 2790000 gain  | AABB   | 6.61232 |
| Score=0.9: Score=501 nsv516709  | 4 | 5580000 gain  | AAAA   | -1      |
| Score=0.9: Score=554 nsv871854  | 4 | 44850000 gain | AABB   | 3.85467 |
| . Score=459 dgv38e201           | 4 | 60000 gain    | AABB   | -1      |
| . Score=223 nsv522987           | 4 | 330000 gain   | AAAA   | 36.9381 |
| Score=0.9: Score=438 esv274476  | 4 | 8470000 gain  | AAAA   | -1      |
| . Score=101 esv148805           | 4 | 310000 gain   | AABB   | 7.1396  |
| Score=0.9: Score=393 nsv526227  | 6 | 760000 gain   | AAABBB | 100     |
| Score=0.9: Score=156 nsv435845  | 3 | 660000 gain   | AAB    | 4.25847 |
| Score=0.9: Score=281 nsv820880  | 4 | 160000 gain   | AAAB   | -1      |

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|---------------------------------|---|---------------|---------|----------|
| Score=0.9! Score=288 esv271685  | 4 | 28540000 gain | AAAB    | 1.93683  |
| Score=0.9! Score=507 esv271852  | 3 | 8470000 gain  | AAB     | 0.467238 |
| Score=0.9! Score=275 esv242216  | 5 | 1260000 gain  | AAAAB   | 8.72821  |
| . Score=257 nsv522601           | 3 | 120000 gain   | AAB     | -1       |
| Score=0.9! Score=481 nsv508042  | 3 | 2020000 gain  | AAB     | 1.63236  |
| Score=0.9! Score=418 nsv442271  | 4 | 7370000 gain  | AAAA    | -1       |
| Score=0.9! Score=505 nsv508044  | 5 | 4620000 gain  | AAAAA   | -1       |
| Score=0.9! Score=497 nsv528675  | 4 | 11380000 gain | AAAA    | -1       |
| Score=0.9! Score=456 esv265822  | 6 | 15520000 gain | AAAAAA  | -1       |
| Score=0.9! Score=441 esv26033,1 | 3 | 6680000 gain  | AAB     | 0.503676 |
| Score=0.9! Score=262 esv267177  | 5 | 390000 gain   | AAABB   | 34.1463  |
| Score=0.9! Score=451 esv267247  | 4 | 6980000 gain  | AAAB    | 4.69502  |
| Score=0.9! Score=116 esv272260  | 4 | 130000 gain   | AAAB    | -1       |
| Score=0.9! Score=270 esv29119,1 | 6 | 1930000 gain  | AAAABB  | 50.1259  |
| Score=0.9! Score=294 esv267094  | 4 | 8440000 gain  | AAAA    | -1       |
| . Score=335 dgv184e1,1          | 7 | 410000 gain   | AAAAABB | 6.31945  |
| Score=0.9! Score=498 esv261371  | 4 | 23020000 gain | AAAB    | 1.1735   |
| Score=0.9! Score=302 esv143238  | 3 | 210000 gain   | AAB     | -1       |
| Score=0.9! Score=437 esv271912  | 3 | 12680000 gain | AAB     | 0.847781 |
| Score=0.9! Score=221 nsv518954  | 3 | 640000 gain   | AAB     | -1       |
| Score=0.9! Score=460 dgv685e1C  | 6 | 7120000 gain  | AAAABB  | 56.4343  |
| Score=0.9! Score=290 esv25159,1 | 3 | 10980000 gain | AAA     | -1       |
| Score=0.9! Score=468 esv271995  | 4 | 12490000 gain | AAAA    | -1       |
| Score=0.9! Score=284 nsv833936  | 5 | 1710000 gain  | AAABB   | 69.0339  |
| Score=0.9! Score=397 esv272001  | 3 | 1830000 gain  | AAB     | 3.65124  |
| Score=0.9! Score=426 esv266098  | 5 | 21210000 gain | AAAAA   | -1       |
| Score=0.9! Score=485 esv33940,1 | 3 | 6880000 gain  | AAA     | -1       |
| . Score=222 nsv438356           | 5 | 120000 gain   | AAABB   | -1       |
| Score=0.9! Score=623 nsv874383  | 5 | 9330000 gain  | AAABB   | 37.5719  |
| . Score=307 dgv4201n7           | 5 | 50000 gain    | AAABB   | -1       |
| Score=0.9! Score=270 dgv4204n7  | 3 | 1320000 gain  | AAB     | 7.53434  |
| . Score=168 esv25769,1          | 3 | 90000 gain    | AAB     | -1       |
| Score=0.9! Score=276 nsv829489  | 6 | 290000 gain   | AAABBB  | 100      |
| Score=0.9! Score=360 nsv10063,1 | 5 | 20000 gain    | AAABB   | -1       |
| Score=0.9! Score=213 dgv59n17,1 | 5 | 2230000 gain  | AAABB   | 6.63492  |

|                                 |   |               |       |         |
|---------------------------------|---|---------------|-------|---------|
| Score=0.9; Score=144 dgv61n16,  | 3 | 40000 gain    | AAB   | -1      |
| Score=0.9; Score=320 esv141733  | 3 | 7370000 gain  | AAB   | 44.0202 |
| Score=0.9; Score=269 nsv441770  | 4 | 680000 gain   | AABB  | 17.9881 |
| Score=1;N Score=451 dgv86e18C   | 3 | 30610000 gain | AAA   | -1      |
| Score=0.9; Score=293 esv100471  | 3 | 1980000 gain  | AAB   | 58.4431 |
| Score=0.9; Score=113 dgv4306n7  | 3 | 10000 gain    | AAB   | -1      |
| Score=0.9; Score=274 nsv514976  | 3 | 1350000 gain  | AAB   | 22.0657 |
| Score=0.9; Score=414 nsv819183  | 4 | 5690000 gain  | AABB  | 1.22073 |
| Score=0.9; Score=438 nsv470491  | 4 | 21530000 gain | AAAA  | -1      |
| Score=0.9; Score=554 esv100492  | 4 | 37610000 gain | AAAA  | -1      |
| Score=0.9; Score=339 esv259284  | 4 | 13090000 gain | AABB  | 1.4904  |
| Score=0.9; Score=430 nsv213622  | 4 | 5140000 gain  | AABB  | 10.7903 |
| Score=0.9; Score=443 esv272486  | 4 | 9010000 gain  | AAAA  | -1      |
| Score=0.9; Score=642 esv267443  | 4 | 15990000 gain | AAAA  | -1      |
| Score=0.9; Score=419 esv134604  | 3 | 5240000 gain  | AAA   | -1      |
| . Score=179 nsv834663           | 3 | 130000 gain   | AAA   | 100     |
| . Score=130 nsv834662           | 3 | 10000 gain    | AAA   | -1      |
| Score=0.9; Score=442 nsv3789,e  | 4 | 1300000 gain  | AABB  | 100     |
| . Score=436 nsv834697           | 3 | 20000 gain    | AAA   | 100     |
| Score=0.9; Score=470 esv266505  | 3 | 21570000 gain | AAA   | -1      |
| Score=0.9; Score=411 nsv3897,e  | 4 | 24620000 gain | AAAA  | -1      |
| Score=0.9; Score=523 esv25892,i | 5 | 8450000 gain  | AAAAA | -1      |
| Score=0.9; Score=507 nsv515688  | 4 | 13810000 gain | AAAA  | -1      |
| Score=0.9; Score=442 esv265835  | 5 | 3290000 gain  | AAAAA | -1      |
| Score=0.9; Score=410 dgv1513e1  | 3 | 7830000 gain  | AAA   | -1      |
| Score=0.9; Score=626 nsv877687  | 4 | 16800000 gain | AAAA  | -1      |
| . Score=272 esv114142           | 4 | 410000 gain   | AAAB  | 88.8711 |
| . Score=786 nsv877692           | 4 | 90000 gain    | AAAB  | -1      |
| Score=0.9; Score=536 nsv236646  | 5 | 24170000 gain | AAABB | 12.1685 |
| Score=0.9; Score=504 esv179126  | 3 | 5350000 gain  | AAA   | -1      |
| Score=0.9; Score=316 esv32747,c | 4 | 2190000 gain  | AABB  | 90.2248 |
| . Score=257 nsv437360           | 4 | 750000 gain   | AABB  | -1      |
| . Score=280 esv267523           | 5 | 30000 gain    | -1    | -1      |
| . Score=209 nsv819527           | 5 | 160000 gain   | AAABB | -1      |
| Score=0.9; Score=443 dgv309n21  | 5 | 2140000 gain  | AAABB | 25.9309 |

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|---------------------------------|---|---------------|--------|----------|
| . Score=372 nsv516867           | 5 | 20000 gain    | AAABB  | -1       |
| Score=0.9! Score=128 esv5061,es | 3 | 440000 gain   | AAB    | 1.33559  |
| . Score=407 nsv878167           | 3 | 50000 gain    | AAB    | -1       |
| Score=0.9! Score=289 esv267767  | 3 | 1850000 gain  | AAB    | 7.00977  |
| . Score=854 esv266310           | 3 | 40000 gain    | AAB    | -1       |
| Score=0.9! Score=113 esv118129  | 3 | 480000 gain   | AAB    | 36.4281  |
| Score=0.9! Score=571 esv26652,c | 3 | 62430 gain    | AAB    | -1       |
| Score=0.9! Score=152 nsv507147  | 4 | 50000 gain    | AABB   | -1       |
| Score=0.9! Score=241 nsv878278  | 4 | 1770000 gain  | AABB   | 1.21347  |
| . Score=388 nsv433362           | 5 | 80000 gain    | AAABB  | 18.3198  |
| Score=0.9! Score=283 nsv428437  | 1 | 260000 loss   | A      | -1       |
| Score=0.9! Score=521 nsv527095  | 3 | 31250000 gain | AAA    | -1       |
| Score=0.9! Score=581 dgv97e19,i | 4 | 23780000 gain | AAAA   | -1       |
| Score=0.9! Score=422 esv265850  | 5 | 6070000 gain  | AAAAA  | -1       |
| Score=0.9! Score=486 esv4642,d  | 3 | 19620000 gain | AAA    | -1       |
| Score=0.9! Score=528 dgv885n67  | 5 | 3610000 gain  | AAABB  | 3.47917  |
| Score=0.9! Score=659 esv269003  | 4 | 64640000 gain | AAAA   | -1       |
| Score=0.9! Score=483 esv993671  | 3 | 24500000 gain | AAA    | -1       |
| Score=0.9! Score=769 esv23426,i | 6 | 40000 gain    | AAAAAA | 14.3123  |
| Score=0.9! Score=219 nsv471487  | 6 | 134276 gain   | AAAAAA | -1       |
| Score=0.9! Score=238 esv21891,c | 3 | 150000 gain   | -1     | -1       |
| Score=0.9! Score=668 nsv880520  | 3 | 34900000 gain | AAB    | 0.247004 |
| . Score=327 dgv6032n7           | 3 | 10000 gain    | AAB    | -1       |
| Score=0.9! Score=510 dgv6073n7  | 4 | 31430000 gain | AAAA   | -1       |
| Score=0.9! Score=272 nsv882003  | 3 | 4050000 gain  | AAB    | 2.1441   |
| Score=0.9! Score=700 dgv6179n7  | 4 | 10020000 gain | AAAA   | -1       |
| Score=0.9! Score=659 esv273077  | 4 | 50730000 gain | AAAB   | 0.767163 |
| Score=0.9! Score=477 esv267448  | 3 | 14550000 gain | AAB    | 0.91928  |
| Score=0.9! Score=294 esv270273  | 4 | 2210000 gain  | AAAB   | 7.58891  |
| Score=0.9! Score=476 nsv830540  | 3 | 19050000 gain | AAA    | -1       |
| Score=0.9! Score=273 nsv328840  | 5 | 560000 gain   | AAABB  | 69.7505  |
| Score=0.9! Score=294 nsv521607  | 3 | 9190000 gain  | AAB    | 0.938385 |
| Score=0.9! Score=421 nsv883397  | 3 | 8050000 gain  | AAA    | -1       |
| Score=0.9! Score=445 esv27793,c | 4 | 2360000 gain  | AAAB   | 100      |
| Score=0.9! Score=607 nsv349842  | 3 | 18570000 gain | AAB    | 0.518409 |

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|-----------------------------------|---|---------------|-------|----------|
| . Score=907 nsv830622             | 3 | 30000 gain    | AAB   | -1       |
| Score=0.9; Score=261 esv273176    | 4 | 360000 gain   | AAAB  | 22.1237  |
| . Score=166 nsv823676             | 4 | 280000 gain   | AAAB  | 100      |
| Score=0.9; Score=419 esv273203    | 4 | 9870000 gain  | AAAA  | -1       |
| . Score=260 nsv885888             | 4 | 10000 gain    |       | -1       |
| Score=0.9; Score=642 esv6929,esv  | 3 | 11830000 gain | AAB   | 36.6399  |
| Score=0.9; Score=650 dgv59n64,1   | 3 | 15040000 gain | AAA   | -1       |
| . Score=340 esv267769             | 3 | 1390000 gain  | AAB   | -1       |
| . Score=259 nsv509142             | 3 | 630000 gain   | AAB   | 6.04952  |
| . Score=365 esv128530             | 3 | 690000 gain   | AAB   | -1       |
| . Score=509 nsv886329             | 4 | 90000 gain    | AAAA  | 53.0365  |
| . Score=100 esv266485             | 4 | 60000 gain    | AAAA  | -1       |
| Score=0.9; Score=412 nsv516048    | 4 | 13960000 gain | AAAA  | -1       |
| Score=0.9; Score=523 esv273255    | 3 | 11530000 gain | AAA   | -1       |
| Score=0.9; Score=449 esv273270    | 4 | 21770000 gain | AAAA  | -1       |
| Score=0.9; Score=432 esv273278    | 3 | 3960000 gain  | AAB   | 4.67522  |
| Score=0.9; Score=451 esv124163    | 4 | 5320000 gain  | AAAB  | 96.7645  |
| . Score=397 esv266221             | 3 | 40000 gain    | AAB   | -1       |
| Score=0.9; Score=495 nsv823862    | 3 | 23180000 gain | AAB   | 0.356559 |
| . . .                             | 3 | 55067 gain    | AAB   | -1       |
| . . .                             | 4 | 10000 gain    | AAAB  | -1       |
| Score=0.9; Score=168 dgv1176e1    | 4 | 290000 gain   | AAAB  | 100      |
| . Score=429 dgv7078n7             | 4 | 20000 gain    | AABB  | -1       |
| Score=0.9; Score=107 esv273374    | 4 | 1740000 gain  | AABB  | 4.58457  |
| Score=0.9; Score=519 esv273408    | 4 | 14760000 gain | AAAA  | -1       |
| Score=0.9; Score=437 esv8983,esv  | 3 | 19680000 gain | AAA   | -1       |
| Score=0.9; Score=272 nsv524173    | 5 | 1940000 gain  | AAABB | 100      |
| Score=0.9; Score=559 esv273458    | 4 | 8700000 gain  | AABB  | 9.93203  |
| Score=0.9; Score=288 nsv511358    | 3 | 7220000 gain  | AAB   | 32.2646  |
| Score=0.9; Score=711 esv28195,esv | 4 | 20790000 gain | AAAA  | -1       |
| Score=0.9; Score=261 esv27075,esv | 3 | 520000 gain   | AAB   | 9.67469  |
| Score=0.9; Score=533 esv34648,esv | 4 | 17800000 gain | AAAA  | -1       |
| Score=0.9; Score=431 esv23955,esv | 5 | 6330000 gain  | AAABB | 63.6451  |
| Score=0.9; Score=307 nsv818560    | 4 | 1540000 gain  | AABB  | 1.7339   |
| Score=0.9; Score=280 esv273531    | 4 | 3190000 gain  | AABB  | 100      |

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|---------------------------------|---|---------------|--------|----------|
| Score=0.9! Score=697 esv273655  | 3 | 1820000 gain  | AAB    | 1.34122  |
| . Score=209 esv275541           | 3 | 340000 gain   | AAB    | -1       |
| Score=0.9! Score=325 nsv6086,es | 4 | 5950000 gain  | AAAA   | -1       |
| . Score=270 nsv831271           | 6 | 230000 gain   | AAABBB | 100      |
| Score=0.9! Score=442 esv6612,es | 3 | 14450000 gain | AAA    | -1       |
| Score=0.9! Score=255 esv273690  | 5 | 840000 gain   | AAABB  | 65.1304  |
| Score=0.9! Score=660 dgv7810n7  | 4 | 36920000 gain | AAAA   | -1       |
| Score=0.9! Score=192 nsv891123  | 5 | 290000 gain   | AAAAA  | 4.49722  |
| Score=0.9! Score=236 nsv6290,es | 5 | 380000 gain   | AAAAA  | -1       |
| Score=0.9! Score=496 esv266909  | 4 | 23770000 gain | AABB   | 1.34446  |
| . Score=424 esv24736,1          | 4 | 2240000 gain  | AABB   | -1       |
| Score=0.9! Score=275 nsv511390  | 6 | 890000 gain   | AAABBB | 87.2215  |
| Score=0.9! Score=370 nsv527309  | 4 | 19740000 gain | AAAA   | -1       |
| Score=0.9! Score=240 esv100376  | 5 | 2740000 gain  | AAABB  | 9.49948  |
| . Score=314 dgv7924n7           | 5 | 20000 gain    | AAABB  | -1       |
| Score=0.9! Score=260 nsv891722  | 5 | 1360000 gain  | AAABB  | 18.0115  |
| . Score=239 dgv7969n7           | 5 | 20000 gain    | AAABB  | -1       |
| . . .                           | 3 | 10000 gain    | AAB    | -1       |
| Score=0.9! Score=275 nsv891943  | 3 | 170000 gain   | AAB    | 14.9511  |
| Score=0.9! Score=413 nsv819362  | 4 | 14280000 gain | AABB   | 1.25419  |
| . Score=112 nsv892647           | 4 | 250000 gain   | AABB   | -1       |
| Score=0.9! Score=685 esv273834  | 4 | 15770000 gain | AAAA   | -1       |
| Score=0.9! Score=246 dgv8173n7  | 3 | 2920000 gain  | AAB    | 5.71603  |
| Score=0.9! Score=235 nsv831565  | 3 | 50000 gain    | AAB    | -1       |
| Score=0.9! Score=303 esv266935  | 3 | 29430000 gain | AAB    | 0.634081 |
| Score=0.9! Score=695 dgv8242n7  | 3 | 100000 gain   | AAB    | -1       |
| Score=1;N Score=709 nsv821495   | 3 | 24360000 gain | AAA    | -1       |
| Score=0.9! Score=277 esv267385  | 3 | 310000 gain   | AAA    | 44.6482  |
| . Score=374 esv267769           | 3 | 70000 gain    | AAA    | -1       |
| Score=0.9! Score=281 nsv509311  | 3 | 1020000 gain  | AAB    | 3.69067  |
| Score=0.9! Score=295 nsv525113  | 3 | 3880000 gain  | AAA    | -1       |
| . Score=325 nsv831666           | 4 | 20000 gain    | AABB   | 62.2491  |
| Score=0.9! Score=303 esv273883  | 3 | 1320000 gain  |        | -1       |
| Score=0.9! Score=412 esv273890  | 4 | 11920000 gain | AABB   | 0.803186 |
| Score=0.9! Score=327 nsv8560,es | 3 | 12210000 gain | AAA    | -1       |



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|---------------------------------|---|---------------|--------|----------|
| . Score=238 nsv517335           | 6 | 110000 gain   | AAABBB | 17.7702  |
| . Score=270 dgv8372n7           | 4 | 30000 gain    | AABB   | -1       |
| Score=0.9! Score=192 nsv894386  | 4 | 1510000 gain  | AABB   | 2.62756  |
| Score=0.9! Score=159 esv100910  | 3 | 80000 gain    | AAB    | 9.22149  |
| Score=0.9! Score=374 dgv2430e1  | 3 | 73431 gain    | AAB    | -1       |
| Score=0.9! Score=280 nsv894693  | 3 | 90000 gain    | AAA    | -1       |
| Score=0.9! Score=583 dgv209e1,  | 3 | 10000 gain    | AAA    | 10.0867  |
| Score=0.9! Score=190 nsv894694  | 3 | 180000 gain   | AAB    | -1       |
| Score=0.9! Score=749 nsv894814  | 3 | 11380000 gain | AAB    | 0.373387 |
| . Score=120 nsv894879           | 4 | 190000 gain   | AAAB   | 72.8113  |
| . Score=278 nsv831785           | 4 | 70000 gain    | AAAB   | -1       |
| Score=0.9! Score=311 esv228663  | 4 | 11510000 gain | AABB   | 1.95127  |
| . Score=123 nsv6132,e           | 4 | 70000 gain    | AABB   | -1       |
| Score=0.9! Score=283 esv271932  | 3 | 1150000 gain  | AAB    | 100      |
| . Score=516 nsv831816           | 3 | 50000 gain    | AAB    | -1       |
| Score=0.9! Score=148 esv266995  | 3 | 570000 gain   | AAB    | 62.3355  |
| Score=0.9! Score=676 esv265103  | 4 | 12150000 gain | AAAA   | -1       |
| Score=0.9! Score=446 dgv251e1,  | 3 | 2820000 gain  | AAB    | 2.61171  |
| Score=0.9! Score=134 dgv254e1,  | 3 | 40000 gain    | AAB    | -1       |
| Score=0.9! Score=239 dgv86n27,  | 3 | 3210000 gain  | AAB    | 2.43501  |
| Score=0.9! Score=225 nsv467190  | 3 | 310000 gain   | AAB    | 7.40631  |
| Score=0.9! Score=694 esv270045  | 4 | 17720000 gain | AABB   | 0.790409 |
| . Score=272 dgv743n71           | 4 | 1070000 gain  | AABB   | -1       |
| Score=0.9! Score=268 esv267645  | 4 | 550000 gain   | AABB   | 47.3675  |
| Score=0.9! Score=418 esv167788  | 4 | 4550000 gain  | AAAA   | -1       |
| Score=0.9! Score=654 nsv7497,e  | 3 | 4280000 gain  | AAA    | -1       |
| Score=0.9! Score=449 nsv525892  | 4 | 15010000 gain | AABB   | 1.12191  |
| . Score=263 .                   | 4 | 20000 gain    | AABB   | -1       |
| Score=0.9! Score=499 esv100502  | 3 | 13050000 gain | AAA    | -1       |
| Score=0.9! Score=180 esv266077  | 4 | 1330000 gain  | AABB   | 1.54964  |
| Score=0.9! Score=434 dgv8n64,n  | 4 | 190000 gain   | AABB   | -1       |
| Score=0.9! Score=607 nsv896428  | 3 | 90000 gain    | AAA    | 35.8881  |
| Score=0.9! Score=118 nsv896428  | 3 | 14747 gain    | AAA    | -1       |
| Score=0.9! Score=224 esv22231,c | 4 | 110000 gain   | AABB   | -1       |
| Score=0.9! Score=265 nsv896601  | 4 | 2850000 gain  | AABB   | 0.519937 |

|                                 |   |               |       |          |
|---------------------------------|---|---------------|-------|----------|
| Score=0.9! Score=383 esv274431  | 4 | 10990000 gain | AAAA  | -1       |
| Score=0.9! Score=510 esv195123  | 3 | 12230000 gain | AAA   | -1       |
| . Score=843 dgv1091n7           | 5 | 10000 gain    | AAABB | -1       |
| Score=0.9! Score=472 dgv375e1,  | 5 | 7880000 gain  | AAABB | 85.5912  |
| Score=0.9! Score=269 dgv69n21,  | 5 | 100000 gain   | AAABB | -1       |
| Score=0.9! Score=273 esv267290  | 4 | 160000 gain   |       | -1       |
| . Score=271 nsv482981           | 5 | 310000 gain   | AAABB | 63.2719  |
| Score=0.9! Score=490 esv24876,  | 4 | 2330000 gain  | AABB  | 4.16081  |
| . Score=276 nsv517447           | 5 | 340000 gain   | AAABB | 89.5407  |
| Score=0.9! Score=383 nsv898062  | 3 | 7570000 gain  | AAA   | -1       |
| Score=0.9! Score=276 nsv898088  | 5 | 660000 gain   | AAABB | 33.552   |
| Score=0.9! Score=681 nsv437721  | 4 | 20870000 gain | AAAA  | -1       |
| Score=0.9! Score=598 nsv598,nsv | 3 | 3050000 gain  | AAB   | 5.70413  |
| Score=0.9! Score=424 nsv826263  | 3 | 15950000 gain | AAB   | 1.83095  |
| Score=0.9! Score=273 esv266627  | 3 | 2640000 gain  | AAB   | 4.68876  |
| Score=0.9! Score=703 dgv279e1E  | 3 | 5060000 gain  | AAB   | -1       |
| Score=0.9! Score=285 esv22995,  | 5 | 690000 gain   |       | -1       |
| Score=0.9! Score=419 esv29183,  | 4 | 8800000 gain  | AABB  | 10.8835  |
| Score=0.9! Score=276 nsv82,esv2 | 4 | 740000 gain   | AABB  | 57.318   |
| Score=0.9! Score=651 nsv510302  | 4 | 21770000 gain | AAAA  | -1       |
| Score=0.9! Score=578 nsv899421  | 4 | 11540000 gain | AABB  | 12.3746  |
| Score=0.9! Score=563 esv267473  | 4 | 16180000 gain | AABB  | 0.682372 |
| Score=0.9! Score=111 esv24540,  | 3 | 1290000 gain  | AAB   | 24.0245  |
| Score=0.9! Score=414 esv265666  | 3 | 60000 gain    | AAB   | -1       |
| Score=0.9! Score=270 esv274697  | 4 | 1530000 gain  | AABB  | 1.51713  |
| Score=0.9! Score=262 .          | 4 | 51895 gain    | AABB  | -1       |
| Score=0.9! Score=417 nsv899934  | 3 | 34410000 gain | AAA   | -1       |
| Score=0.9! Score=263 esv270120  | 4 | 1620000 gain  | AABB  | 84.919   |
| Score=0.9! Score=284 nsv525432  | 4 | 5100000 gain  | AAAA  | -1       |
| . Score=175 esv24878,           | 5 | 50000 gain    | AAABB | -1       |
| Score=0.9! Score=268 nsv519614  | 5 | 1290000 gain  | AAABB | 77.4909  |
| Score=0.9! Score=461 esv114009  | 4 | 8750000 gain  | AABB  | 2.03579  |
| Score=0.9! Score=618 esv261414  | 5 | 17370000 gain | AAABB | 27.1885  |
| Score=0.9! Score=271 esv274759  | 5 | 1660000 gain  | AAABB | -1       |
| Score=0.9! Score=506 esv274761  | 4 | 390000 gain   |       | -1       |

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|---------------------------------|---|---------------|-------|----------|
| Score=0.9† Score=407 esv996694  | 4 | 25690000 gain | AABB  | 2.17513  |
| Score=0.9† Score=434 nsv1139,n  | 4 | 480000 gain   | AABB  | -1       |
| Score=0.9† Score=365 esv265745  | 3 | 3140000 gain  | AAA   | -1       |
| Score=0.9† Score=379 nsv820338  | 4 | 8060000 gain  | AABB  | 8.86675  |
| . Score=199 nsv832718           | 4 | 10000 gain    | AABB  | -1       |
| Score=0.9† Score=275 esv6572,n  | 3 | 19110000 gain | AAB   | -1       |
| Score=0.9† Score=263 nsv428292  | 3 | 1300000 gain  | AAB   | 4.99326  |
| Score=0.9† Score=101 dgv602e1,† | 3 | 30000 gain    | AAB   | -1       |
| Score=0.9† Score=269 esv270175  | 4 | 70000 gain    | AABB  | 4.3386   |
| . Score=269 nsv832738           | 4 | 10000 gain    | AABB  | -1       |
| . Score=117 dgv599e1,†          | 6 | 10000 gain    | -1    | -1       |
| . Score=268 nsv818998           | 4 | 50000 gain    | AABB  | -1       |
| Score=0.9† Score=259 esv257172  | 4 | 140000 gain   | AABB  | 100      |
| . Score=759 nsv524527           | 3 | 40000 gain    | AAB   | 83.822   |
| . Score=727 nsv1208,e           | 3 | 10000 gain    | AAB   | -1       |
| Score=0.9† Score=463 esv7166,e  | 3 | 970000 gain   | AAB   | 1.95539  |
| Score=0.9† Score=360 esv212580  | 4 | 6750000 gain  | AAAA  | -1       |
| . Score=183 dgv1869n7           | 4 | 10000 gain    | -1    | -1       |
| Score=0.9† Score=274 esv29451,† | 4 | 4510000 gain  | AAAA  | -1       |
| Score=0.9† Score=436 nsv819994  | 4 | 9950000 gain  | AABB  | 0.815804 |
| . Score=184 nsv456304           | 4 | 70000 gain    | AABB  | -1       |
| Score=0.9† Score=284 nsv516268  | 3 | 1960000 gain  | AAA   | 100      |
| . Score=117 esv28926,†          | 3 | 100000 gain   | AAA   | -1       |
| Score=0.9† Score=351 nsv1278,e  | 4 | 280000 gain   | AAAA  | 100      |
| Score=0.9† Score=441 nsv820177  | 4 | 7590000 gain  | AAAA  | -1       |
| Score=0.9† Score=281 dgv638e1,† | 5 | 560000 gain   | AAABB | 100      |
| Score=0.9† Score=287 nsv470650  | 4 | 3060000 gain  | AABB  | 14.9179  |
| . Score=411 dgv137n21           | 4 | 50000 gain    | AABB  | -1       |
| Score=0.9† Score=139 nsv1305,n  | 4 | 400000 gain   | AAAA  | 90.8007  |
| . Score=150 nsv456326           | 4 | 90000 gain    | AAAA  | -1       |
| Score=0.9† Score=275 esv266469  | 5 | 470000 gain   | AAABB | 67.758   |
| . Score=270 nsv521739           | 4 | 470000 gain   | AAAB  | -1       |
| Score=0.9† Score=309 esv267118  | 4 | 870000 gain   | AAAB  | 100      |
| . Score=716 nsv1319,n           | 4 | 70000 gain    | AAAB  | -1       |
| . Score=452 nsv826992           | 3 | 70000 gain    | -1    | -1       |

|                                 |   |               |        |          |
|---------------------------------|---|---------------|--------|----------|
| Score=0.9; Score=479 esv22714,t | 4 | 1450000 gain  | AABB   | 25.2804  |
| . Score=265 nsv832841           | 4 | 100000 gain   | AABB   | -1       |
| . Score=187 esv274893           | 3 | 310000 gain   | AAA    | 80.6793  |
| Score=0.9; Score=308 esv266708  | 5 | 4010000 gain  | AAABB  | -1       |
| Score=0.9; Score=323 nsv516702  | 5 | 3120000 gain  | AAABB  | 72.0789  |
| . Score=232 nsv902181           | 5 | 150000 gain   | AAABB  | -1       |
| . Score=681 nsv832850           | 4 | 40000 gain    | AABB   | -1       |
| . Score=238 esv996160           | 4 | 300000 gain   | AABB   | 66.8635  |
| Score=0.9; Score=242 nsv827073  | 4 | 720000 gain   | AABB   | 16.0236  |
| . Score=262 dgv2017n7           | 4 | 10000 gain    | AABB   | -1       |
| . Score=239 nsv902416           | 3 | 10000 gain    | -1     | -1       |
| . Score=313 nsv902389           | 4 | 10000 gain    | AABB   | -1       |
| Score=0.9; Score=138 esv2953,es | 4 | 460000 gain   | AABB   | 1.2812   |
| . Score=124 dgv2034n7           | 4 | 160000 gain   | AABB   | -1       |
| . Score=234 nsv832890           | 6 | 40000 gain    | AAABBB | 100      |
| Score=0.9; Score=997 esv267327  | 3 | 90000 gain    | AAB    | -1       |
| Score=0.9; Score=195 esv266874  | 3 | 290000 gain   | AAB    | 42.0905  |
| Score=0.9; Score=263 dgv2076n7  | 3 | 20160000 gain | AAB    | -1       |
| Score=1;N Score=270 nsv509560   | 3 | 3730000 gain  | AAB    | 0.793584 |
| Score=0.9; Score=282 nsv513423  | 3 | 1030000 gain  | AAB    | -1       |
| Score=0.9; Score=246 esv266572  | 3 | 2250000 gain  | AAB    | 19.3165  |
| Score=0.9; Score=285 nsv498844  | 4 | 5420000 gain  | AABB   | 2.02105  |
| Score=0.9; Score=570 nsv904279  | 4 | 16610000 gain | AAAA   | -1       |
| Score=0.9; Score=273 esv274980  | 4 | 980000 gain   | AABB   | 100      |
| Score=0.9; Score=277 esv267264  | 5 | 980000 gain   | AAABB  | 8.8789   |
| Score=0.9; Score=293 nsv469595  | 3 | 2510000 gain  | AAA    | -1       |
| Score=0.9; Score=321 nsv1617,n  | 4 | 1260000 gain  | AABB   | 8.31453  |
| Score=0.9; Score=274 dgv764e1,; | 3 | 570000 gain   | AAB    | 1.50873  |
| Score=0.9; Score=279 esv275009  | 4 | 5080000 gain  | AABB   | 4.47228  |
| Score=0.9; Score=923 nsv518291  | 3 | 130000 gain   | AAB    | 6.24972  |
| Score=0.9; Score=933 nsv471063  | 4 | 380000 gain   | AABB   | 1.30504  |
| Score=0.9; Score=733 esv265795  | 4 | 1010000 gain  | AABB   | 2.69159  |
| Score=0.9; Score=102 esv275037  | 4 | 490000 gain   | AABB   | 3.64152  |
| Score=0.9; Score=689 nsv436835  | 3 | 190000 gain   | AAA    | 15.674   |
| Score=0.9; Score=891 nsv428324  | 3 | 270000 gain   | AAA    | 12.2404  |

|                                 |   |               |       |          |
|---------------------------------|---|---------------|-------|----------|
| Score=0.9† Score=409 nsv1782,d  | 3 | 920000 gain   | AAB   | 40.172   |
| . Score=735 esv227328           | 3 | 80000 gain    | AAB   | -1       |
| Score=0.9† Score=476 esv250512  | 3 | 21810000 gain | AAA   | -1       |
| Score=0.9† Score=102 dgv2979n7  | 3 | 1220000 gain  | AAB   | 6.6248   |
| . Score=846 esv25469,t          | 3 | 130000 gain   | AB    | -1       |
| Score=0.9† Score=231 nsv833413  | 5 | 230000 gain   | AAABB | 87.8293  |
| Score=0.9† Score=284 dgv552e1C  | 4 | 190000 gain   | AAAB  | 12.4503  |
| Score=0.9† Score=133 nsv833461  | 3 | 1090000 gain  | AAB   | 2.00638  |
| Score=0.9† Score=419 esv8272,e  | 4 | 20000 gain    | AAAA  | 61.4822  |
| Score=0.9† Score=429 esv4896,e  | 3 | 4030000 gain  | AAB   | 0.615072 |
| Score=0.9† Score=510 esv5462,e  | 5 | 5680000 gain  | AAABB | 77.6361  |
| Score=0.9† Score=259 nsv828055  | 5 | 20000 gain    | AAABB | -1       |
| Score=0.9† Score=240 esv271607  | 3 | 3100000 gain  | AAA   | -1       |
| Score=0.9† Score=280 nsv507850  | 3 | 2310000 gain  | AAB   | 100      |
| Score=0.9† Score=232 dgv997e1,l | 4 | 70000 gain    | AABB  | -1       |
| Score=0.9† Score=294 esv273813  | 4 | 6550000 gain  | AABB  | 2.26523  |
| . Score=263 esv271615           | 5 | 1140000 gain  | AAABB | 28.9818  |
| Score=0.9† Score=107 esv137642  | 5 | 1140000 gain  | AAABB | 42.1055  |
| Score=0.9† Score=277 nsv909286  | 4 | 40000 gain    | AAAB  | -1       |
| Score=0.9† Score=277 nsv821099  | 4 | 80000 gain    | AAAB  | 100      |
| Score=0.9† Score=523 dgv3383n7  | 3 | 11480000 gain | AAA   | -1       |
| . Score=147 esv266805           | 3 | 480000 gain   |       | -1       |
| Score=0.9† Score=365 esv145257  | 4 | 8380000 gain  | AAAA  | -1       |
| . Score=282 nsv520131           | 5 | 2080000 gain  | AAABB | 100      |
| Score=0.9† Score=368 esv268983  | 4 | 2030000 gain  | AABB  | 17.6138  |
| . Score=269 esv271711           | 4 | 1220000 gain  | AABB  | -1       |
| . Score=347 nsv833660           | 4 | 2950000 gain  | AABB  | 7.61169  |
| . Score=272 esv269189           | 4 | 50000 gain    | AABB  | -1       |
| Score=0.9† Score=477 esv271732  | 4 | 14110000 gain | AABB  | 0.666739 |
| . Score=254 nsv131514           | 4 | 810000 gain   | AABB  | -1       |
| Score=0.9† Score=588 esv271747  | 3 | 6337248 gain  | AAA   | -1       |
| . . .                           | 3 | 60000 gain    | AAB   | -1       |
| Score=0.9† Score=224 esv994482  | 3 | 150000 gain   | AAB   | 5.01727  |
| Score=0.9† Score=792 esv139957  | 3 | 150000 gain   | AAB   | -1       |
| Score=0.9† Score=129 esv25510,l | 3 | 2000000 gain  | AAB   | 6.48469  |

|                                 |   |               |       |         |
|---------------------------------|---|---------------|-------|---------|
| Score=0.9; Score=280 esv177461  | 3 | 3640000 gain  | AAB   | 14.0224 |
| . Score=750 dgv3697n7           | 3 | 210000 gain   | AAB   | -1      |
| Score=0.9; Score=685 dgv3791n7  | 3 | 4280000 gain  | AAB   | 1.3688  |
| Score=0.9; Score=236 esv271835  | 3 | 220000 gain   | AAB   | -1      |
| Score=0.9; Score=392 esv100718  | 3 | 720000 gain   | AAA   | 11.9811 |
| . Score=471 dgv1302e1           | 1 | 20000 loss    | A     | 100     |
| . Score=751 esv995112           | 1 | 20000 loss    | A     | -1      |
| Score=0.9; Score=286 nsv498967  | 3 | 12100000 gain | AAA   | -1      |
| Score=0.9; Score=295 nsv912812  | 3 | 5740000 gain  | AAA   | -1      |
| . Score=276 esv32588,6          | 3 | 200000 gain   | AAA   | 100     |
| Score=0.9; Score=114 esv100010  | 3 | 270000 gain   | AAA   | -1      |
| . Score=771 esv272289           | 4 | 1340000 gain  | AABB  | 4.2254  |
| . Score=249 dgv4643n7           | 4 | 10000 gain    | AABB  | -1      |
| Score=0.9; Score=824 nsv179256  | 4 | 210000 gain   | AABB  | 2.03747 |
| Score=0.9; Score=263 esv272301  | 5 | 9750000 gain  | AAAAA | -1      |
| Score=0.9; Score=618 esv272301  | 5 | 80000 gain    | AAAAA | 100     |
| Score=0.9; Score=274 dgv742e2C  | 4 | 4590000 gain  | AABB  | -1      |
| Score=0.9; Score=412 nsv913398  | 4 | 1030000 gain  | AABB  | 2.79713 |
| Score=0.9; Score=576 esv143389  | 4 | 11690000 gain | AAAA  | -1      |
| Score=0.9; Score=423 esv997049  | 4 | 4530000 gain  | AABB  | 3.49289 |
| . Score=360 nsv834086           | 4 | 150000 gain   | AABB  | 21.9682 |
| . Score=697 dgv4771n7           | 4 | 60000 gain    | AABB  | 40.3325 |
| . Score=553 esv272363           | 4 | 10000 gain    | AABB  | -1      |
| . Score=111 esv263677           | 4 | 100000 gain   | AABB  | 33.3609 |
| . Score=148 nsv913946           | 4 | 40000 gain    | AABB  | -1      |
| . Score=148 nsv834109           | 3 | 20000 gain    | AAA   | 74.5606 |
| Score=0.9; Score=195 esv272372  | 4 | 1660000 gain  | AABB  | 1.01238 |
| . Score=246 nsv519904           | 4 | 20000 gain    | AAAA  | 100     |
| Score=0.9; Score=255 esv991505  | 4 | 30000 gain    | AAAA  | -1      |
| Score=0.9; Score=799 nsv428384  | 4 | 16090000 gain | AABB  | -1      |
| Score=0.9; Score=262 esv100256  | 4 | 1070000 gain  | AABB  | 56.4349 |
| Score=0.9; Score=789 dgv74n16,1 | 3 | 220000 gain   | AAB   | 1.26346 |
| Score=0.9; Score=232 dgv4850n7  | 4 | 640000 gain   | AABB  | 1.35682 |
| Score=0.9; Score=407 esv992649  | 4 | 50000 gain    | AABB  | -1      |
| Score=0.9; Score=838 dgv1387e1  | 3 | 550000 gain   | AAB   | 41.2963 |

|                                 |   |               |         |          |
|---------------------------------|---|---------------|---------|----------|
| Score=0.9! Score=778 nsv914390  | 4 | 50000 gain    | AABB    | 11.8148  |
| Score=0.9! Score=976 esv266782  | 3 | 440000 gain   | AAB     | 1.11226  |
| Score=0.9! Score=273 nsv7350,n  | 3 | 60000 gain    | AAB     | -1       |
| Score=0.9! Score=389 esv242248  | 3 | 90000 gain    | AAB     | 29.1344  |
| Score=0.9! Score=676 nsv828979  | 3 | 50000 gain    | AAB     | -1       |
| Score=0.9! Score=442 esv272445  | 3 | 5390000 gain  | AAB     | 0.624221 |
| . Score=266 esv272475           | 7 | 20000 gain    | AAAABBB | 81.8992  |
| . Score=239 nsv915525           | 4 | 10000 gain    | AABB    | -1       |
| Score=0.8! Score=919 dgv781n67  | 4 | 540000 gain   | AABB    | 0.533598 |
| Score=0.9! Score=560 esv25002,r | 3 | 26760000 gain | AAB     | 1.04541  |
| Score=0.9! Score=447 nsv507970  | 3 | 1370000 gain  | AAB     | 9.11466  |
| Score=0.9! Score=338 esv267850  | 3 | 1320000 gain  | AAB     | -1       |
| Score=0.9! Score=491 esv274023  | 4 | 2540000 gain  | AAAB    | 100      |
| Score=0.9! Score=662 essv6070,r | 3 | 68000000 gain | AAB     | 0.50492  |
| Score=0.9! Score=662 dgv1405e1  | 3 | 7200000 gain  | AAB     | 3.0817   |
| Score=0.9! Score=162 nsv10003   | 3 | 10560 gain    | AAB     | -1       |
| . . .                           | 1 | 10000 loss    | A       | -1       |
| Score=0.9! Score=616 dgv11e1,e  | 1 | 34670000 loss | A       | 0.494588 |
| . Score=287 nsv834669           | 1 | 10000 loss    | A       | -1       |
| Score=0.9! Score=454 nsv461350  | 3 | 12570000 gain | AAA     | -1       |
| Score=0.9! Score=286 esv267087  | 4 | 400000 gain   | AAAB    | 16.7432  |
| Score=0.9! Score=554 nsv932,ns  | 4 | 38530000 gain | AAAA    | -1       |
| . Score=287 esv242133           | 5 | 340000 gain   | AAABB   | 37.7124  |
| . Score=221 nsv525678           | 3 | 20000 gain    | AAB     | -1       |
| Score=0.9! Score=288 nsv525045  | 3 | 820000 gain   | AAB     | 32.0364  |
| . Score=116 .                   | 3 | 20000 gain    | AAB     | -1       |
| Score=0.9! Score=320 nsv436703  | 3 | 7190000 gain  | AAB     | 2.811    |
| Score=0.9! Score=516 nsv834300  | 3 | 10000 gain    | AAB     | -1       |
| Score=0.9! Score=421 esv267702  | 1 | 13920000 loss | A       | -1       |
| Score=0.9! Score=626 essv20845  | 4 | 15190000 gain | AAAA    | -1       |
| . Score=255 esv274065           | 4 | 70000 gain    | AAAB    | -1       |
| Score=0.9! Score=536 esv21640,t | 4 | 40040000 gain | AAAB    | 0.491575 |
| Score=0.9! Score=571 esv26652,t | 4 | 62430 gain    | AAAB    | -1       |
| . Score=507 nsv878455           | 3 | 80000 gain    | AAA     | 100      |
| . Score=388 nsv441855           | 3 | 160000 gain   | AAA     | -1       |

|                                 |   |               |        |          |
|---------------------------------|---|---------------|--------|----------|
| Score=0.9! Score=769 nsv820863  | 3 | 40000 gain    | AAA    | 10.9205  |
| Score=0.9! Score=219 nsv820863  | 3 | 134276 gain   | AAA    | -1       |
| Score=0.9! Score=612 esv121866  | 3 | 140000 gain   | -1     | -1       |
| Score=0.9! Score=172 dgv1741e1  | 3 | 380000 gain   | AAB    | 9.74695  |
| . Score=215 nsv428459           | 3 | 10000 gain    | AAB    | -1       |
| . Score=365 nsv881117           | 3 | 30000 gain    | AAB    | -1       |
| Score=0.9! Score=172 nsv511283  | 3 | 280000 gain   | AAB    | 2.37159  |
| . Score=219 nsv830196           | 3 | 20000 gain    | AAA    | 100      |
| Score=0.9! Score=668 dgv5993n7  | 3 | 11860000 gain | AAB    | 31.4077  |
| . Score=227 dgv6250n7           | 3 | 40000 gain    | -1     | -1       |
| Score=0.9! Score=249 nsv883139  | 3 | 30000 gain    | AAB    | 99.4079  |
| . Score=248 nsv886664           | 3 | 10000 gain    | -1     | -1       |
| . Score=247 nsv831103           | 3 | 20000 gain    | AAB    | 100      |
| . Score=228 nsv470213           | 5 | 10000 gain    | -1     | -1       |
| . Score=275 nsv891250           | 3 | 730000 gain   | AAB    | 27.9433  |
| Score=0.9! Score=367 esv992210  | 1 | 23360000 loss | A      | -1       |
| Score=0.9! Score=391 esv273794  | 1 | 4040000 loss  | A      | 0.987943 |
| Score=0.9! Score=279 esv266940  | 1 | 154022 loss   | A      | -1       |
| . Score=264 nsv892650           | 1 | 20000 loss    | -1     | -1       |
| Score=0.9! Score=721 dgv2313e1  | 3 | 100000 gain   | AAB    | 100      |
| Score=0.9! Score=243 esv273844  | 3 | 450000 gain   | AAB    | -1       |
| Score=0.9! Score=213 nsv893080  | 3 | 310000 gain   | AAB    | 55.0266  |
| . Score=396 esv265940           | 3 | 20000 gain    | -1     | -1       |
| . Score=318 nsv7608,e           | 3 | 240000 gain   | -1     | -1       |
| Score=0.9! Score=138 esv274376  | 3 | 380000 gain   | AAB    | 3.11286  |
| Score=0.9! Score=487 dgv909n71  | 3 | 50000 gain    | AAB    | 54.4664  |
| Score=0.9! Score=118 esv28562,i | 3 | 14747 gain    | AAB    | -1       |
| Score=0.9! Score=681 nsv428267  | 1 | 52476516 loss | A      | -1       |
| . . .                           | 3 | 60000 gain    | AAA    | -1       |
| Score=0.9! Score=670 .          | 3 | 40000 gain    | AAA    | 46.6712  |
| Score=0.9! Score=439 esv267435  | 1 | 9500000 loss  | A      | -1       |
| . Score=963 nsv898846           | 6 | 50000 gain    | AAAABB | 100      |
| . Score=274 nsv832344           | 4 | 10000 gain    | AAAB   | -1       |
| Score=0.9! Score=287 esv271722  | 4 | 2240000 gain  | AAAB   | 63.7764  |
| . Score=254 .                   | 4 | 30000 gain    | AAAB   | -1       |



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|---------------------------------|---|---------------|-------|----------|
| . Score=365 esv275049           | 5 | 780000 gain   | AAAAB | 16.1148  |
| . Score=275 nsv469162           | 4 | 50000 gain    | AAAB  | -1       |
| Score=0.9; Score=271 nsv528556  | 4 | 1250000 gain  | AAAB  | 4.4111   |
| Score=0.9; Score=274 dgv92n21,1 | 3 | 840000 gain   | AAB   | -1       |
| Score=0.9; Score=272 nsv898915  | 3 | 1680000 gain  | AAB   | 7.59037  |
| Score=0.9; Score=392 esv272970  | 3 | 440000 gain   | AAB   | -1       |
| Score=0.9; Score=424 esv266088  | 3 | 7740000 gain  | AAB   | 1.84158  |
| Score=0.9; Score=618 esv274765  | 3 | 12340000 gain | AAA   | -1       |
| Score=0.9; Score=693 esv220587  | 3 | 730000 gain   | AAB   | 12.929   |
| Score=0.9; Score=307 esv274808  | 4 | 1210000 gain  | AAAB  | 27.1503  |
| Score=0.9; Score=145 esv274816  | 3 | 430000 gain   | AAB   | 7.56677  |
| . Score=940 esv274821           | 3 | 40000 gain    | AAB   | -1       |
| . Score=501 esv26193,1          | 4 | 130000 gain   | AAAB  | 32.6814  |
| Score=0.9; Score=227 esv274824  | 3 | 1320000 gain  | AAB   | 2.09557  |
| Score=0.9; Score=669 nsv516205  | 3 | 99878 gain    | AAB   | -1       |
| Score=0.9; Score=275 nsv510626  | 3 | 19110000 gain | AAB   | -1       |
| Score=0.9; Score=263 dgv1836n7  | 3 | 1300000 gain  | AAB   | 1.45547  |
| Score=0.9; Score=165 nsv428292  | 3 | 60000 gain    | AAB   | -1       |
| Score=0.9; Score=242 dgv304e2C  | 3 | 510000 gain   | AAB   | 4.41611  |
| Score=0.9; Score=142 dgv2045n7  | 4 | 20000 gain    | AABB  | 3.49704  |
| Score=0.9; Score=663 nsv902569  | 3 | 20000 gain    | AAB   | -1       |
| Score=0.9; Score=195 nsv827154  | 3 | 320000 gain   | AAB   | 1.39934  |
| Score=1;N Score=270 dgv2099n7   | 3 | 2410000 gain  | AAB   | 0.764695 |
| Score=0.9; Score=142 esv999310  | 3 | 150000 gain   | AAB   | 100      |
| Score=0.9; Score=280 dgv874e1,1 | 3 | 1730000 gain  | AAB   | 0.822878 |
| Score=0.9; Score=213 dgv883e1,1 | 3 | 460000 gain   | AAB   | -1       |
| Score=0.9; Score=476 esv266094  | 3 | 230000 gain   |       | -1 -1    |
| Score=0.9; Score=177 esv29998,1 | 3 | 50000 gain    | AAB   | -1       |
| Score=0.9; Score=379 esv29264,1 | 3 | 320000 gain   | AAB   | 4.95936  |
| Score=0.9; Score=277 nsv909286  | 4 | 40000 gain    | AAAB  | -1       |
| Score=0.9; Score=277 esv4511,d  | 4 | 470000 gain   | AAAB  | 19.0016  |
| . Score=292 nsv909289           | 3 | 70000 gain    | AAB   | -1       |
| Score=0.9; Score=471 esv267875  | 3 | 3310000 gain  | AAB   | 7.16881  |
| Score=0.9; Score=588 nsv526596  | 1 | 48107248 loss | A     | -1       |
| Score=0.9; Score=224 nsv821117  | 3 | 110000 gain   | AAA   | 20.1103  |

|                                 |   |               |        |          |
|---------------------------------|---|---------------|--------|----------|
| Score=0.9; Score=115 esv28703   | 3 | 20000 gain    | AAA    | 29.5738  |
| .                               | 3 | 8983 gain     | AAA    | -1       |
| Score=0.9; Score=244 nsv522008  | 1 | 10000 loss    |        | -1       |
| . Score=240 nsv834001           | 1 | 10000 loss    |        | -1       |
| Score=0.9; Score=340 esv170890  | 3 | 9810000 gain  | AAA    | -1       |
| . Score=519 esv141189           | 6 | 10000 gain    | AAAABB | 100      |
| . Score=188 nsv912983           | 3 | 160000 gain   | AAB    | -1       |
| Score=0.9; Score=104 dgv4624n7  | 3 | 1780000 gain  | AAB    | 2.10077  |
| . Score=250 esv272289           | 3 | 10000 gain    | AAB    | -1       |
| . Score=659 nsv517702           | 4 | 340000 gain   | AABB   | 2.76928  |
| Score=0.9; Score=106 dgv4653n7  | 3 | 730000 gain   | AAB    | 2.01143  |
| Score=0.9; Score=125 esv24036,1 | 3 | 95520 gain    | AAB    | -1       |
| . Score=292 esv267191           | 4 | 330000 gain   | AABB   | 10.1381  |
| Score=0.9; Score=799 nsv469815  | 3 | 16090000 gain | AAB    | -1       |
| Score=0.9; Score=262 esv21839,1 | 3 | 830000 gain   | AAB    | 3.82082  |
| Score=0.9; Score=238 nsv527637  | 3 | 30000 gain    | AAB    | -1       |
| Score=0.9; Score=296 esv272393  | 3 | 520000 gain   | AAB    | 46.6362  |
| Score=0.9; Score=265 nsv915082  | 1 | 30000 loss    | A      | -1       |
| . Score=331 nsv834227           | 4 | 20000 gain    |        | -1       |
| Score=1;N Score=256 esv267399   | 3 | 100000 gain   | AAB    | 6.84711  |
| Score=0.9; Score=538 esv274026  | 3 | 1330000 gain  | AAB    | 100      |
| . Score=318 nsv7187             | 6 | 20000 gain    | AAAAAB | 61.4059  |
| . Score=690 esv274759           | 5 | 30000 gain    | AAABB  | 14.3496  |
| Score=0.9; Score=107 essv16633  | 3 | 320000 gain   | AAB    | 9.54857  |
| Score=0.9; Score=268 nsv499132  | 3 | 2030000 gain  | AAB    | 0.803109 |
| Score=0.9; Score=273 nsv499132  | 3 | 40000 gain    | AAB    | -1       |
| . Score=108 nsv436272           | 3 | 130000 gain   | AAB    | 17.8052  |
| . Score=239 nsv3792,n:          | 3 | 20000 gain    | AAA    | 100      |
| Score=0.9; Score=124 nsv834676  | 3 | 190000 gain   | AAA    | -1       |
| Score=0.9; Score=359 esv995444  | 3 | 1430000 gain  | AAA    | -1       |
| Score=0.9; Score=624 nsv876766  | 3 | 230000 gain   | AAA    | 38.2855  |
| . Score=600 nsv877220           | 3 | 20000 gain    | AAA    | 100      |
| . Score=507 nsv822202           | 3 | 70000 gain    | AAA    | -1       |
| Score=0.9; Score=114 dgv1569e1  | 5 | 20000 gain    |        | -1       |
| Score=0.9; Score=381 dgv5467n7  | 5 | 150000 gain   | AAABB  | 16.4136  |

|                                 |   |               |        |          |
|---------------------------------|---|---------------|--------|----------|
| Score=0.9; Score=219 nsv10641,1 | 1 | 174276 loss   | A      | -1       |
| Score=0.9; Score=232 nsv509072  | 3 | 1620000 gain  | AAB    | 3.18956  |
| . Score=242 nsv5002,n           | 4 | 120000 gain   | AABB   | 41.5836  |
| . Score=804 esv266149           | 3 | 80000 gain    | AAB    | 61.5362  |
| Score=0.9; Score=429 nsv5230,e  | 4 | 500000 gain   | AABB   | 2.90822  |
| Score=0.9; Score=366 dgv1917e1  | 3 | 530000 gain   | AAB    | 1.03727  |
| . Score=108 nsv884129           | 3 | 10000 gain    | AAB    | -1       |
| . Score=108 esv267026           | 6 | 10000 gain    | AAABBB | 24.6938  |
| Score=0.9; Score=443 nsv884405  | 4 | 960000 gain   | AABB   | 0.986513 |
| . Score=634 esv270331           | 4 | 160000 gain   | AABB   | 2.6962   |
| . Score=202 esv230123           | 4 | 170000 gain   | AABB   | 7.38949  |
| . Score=268 dgv753n27           | 4 | 60000 gain    | AABB   | -1       |
| Score=0.9; Score=263 nsv830649  | 3 | 80000 gain    | AAA    | 100      |
| . Score=243 esv6714,n           | 3 | 20000 gain    | AAA    | -1       |
| Score=0.9; Score=272 esv271615  | 1 | 1620000 loss  | A      | 100      |
| . Score=152 nsv510080           | 1 | 210000 loss   | A      | -1       |
| . Score=377 nsv5871,e           | 4 | 10000 gain    | AAAB   | 17.4148  |
| Score=0.9; Score=120 nsv515042  | 3 | 140000 gain   | AAB    | 6.63343  |
| . Score=266 nsv831246           | 5 | 20000 gain    | AAABB  | 80.3055  |
| Score=0.9; Score=192 nsv891139  | 1 | 290000 loss   | A      | 2.19623  |
| . Score=562 esv273841           | 3 | 140000 gain   | AAB    | 9.51239  |
| Score=0.9; Score=487 nsv482152  | 1 | 50000 loss    | A      | 7.22425  |
| Score=0.9; Score=118 nsv896428  | 1 | 14747 loss    | A      | -1       |
| Score=0.9; Score=223 esv274548  | 3 | 1210000 gain  | AAB    | 1.16231  |
| Score=0.9; Score=404 esv27744,1 | 3 | 2000000 gain  | AAB    | 13.1799  |
| Score=0.9; Score=274 esv141454  | 4 | 2020000 gain  | AABB   | 0.742839 |
| . Score=179 nsv899507           | 5 | 30000 gain    | -1     | -1       |
| Score=0.9; Score=265 nsv520280  | 3 | 290000 gain   | AAB    | 27.5981  |
| . Score=346 nsv832574           | 5 | 10000 gain    | -1     | -1       |
| Score=0.9; Score=434 nsv1140,e  | 3 | 1680000 gain  | AAB    | 1.04609  |
| . Score=764 esv274787           | 3 | 60000 gain    | AAB    | -1       |
| Score=0.9; Score=418 dgv239n27  | 3 | 11270000 gain | AAB    | 2.98909  |
| Score=0.9; Score=693 nsv826821  | 3 | 4070000 gain  | AAB    | 31.9803  |
| Score=0.9; Score=669 nsv518491  | 3 | 99878 gain    | AAB    | -1       |
| Score=0.9; Score=248 esv242196  | 5 | 10000 gain    | AAABB  | 59.7169  |

|                                 |   |               |      |         |
|---------------------------------|---|---------------|------|---------|
| Score=0.9; Score=260 dgv113e5E  | 4 | 10000 gain    | AAAA | 33.787  |
| Score=0.9; Score=295 dgv2640n7  | 3 | 2710000 gain  | AAB  | 8.52517 |
| . Score=351 nsv905565           | 3 | 30000 gain    | AAB  | -1      |
| Score=0.9; Score=689 nsv433438  | 3 | 110000 gain   | AAA  | 9.33868 |
| Score=0.9; Score=247 nsv433437  | 3 | 10000 gain    | AAB  | -1      |
| Score=0.9; Score=409 dgv490e1E  | 3 | 10070000 gain | AAB  | 4.54035 |
| Score=0.9; Score=266 nsv907362  | 1 | 3320000 loss  | A    | -1      |
| . Score=439 esv23611,u          | 1 | 60000 loss    | A    | -1      |
| Score=0.9; Score=379 nsv523265  | 3 | 420000 gain   | AAB  | 3.87842 |
| . Score=317 esv271639           | 3 | 440000 gain   | AAB  | 19.0976 |
| . Score=247 nsv910922           | 3 | 30000 gain    | AAA  | 54.7302 |
| Score=0.9; Score=276 esv24941,u | 4 | 260000 gain   | AABB | 1.00561 |
| Score=0.9; Score=851 nsv820830  | 4 | 190000 gain   | AABB | 14.618  |
| Score=0.9; Score=961 esv207792  | 4 | 230000 gain   | AABB | 21.0259 |
| Score=0.9; Score=278 dgv421n27  | 3 | 110000 gain   | AAA  | 53.2496 |
| . Score=951 nsv470535           | 3 | 20000 gain    | AAA  | 100     |
| . Score=711 esv118841           | 3 | 90000 gain    | AAB  | 7.31916 |
| Score=0.9; Score=935 esv272237  | 3 | 870000 gain   | AAB  | 100     |
| Score=0.9; Score=289 nsv6826,n  | 3 | 2130000 gain  | AAB  | 3.76978 |
| Score=0.9; Score=463 esv272941  | 3 | 6880000 gain  | AAB  | 15.3501 |
| Score=0.9; Score=569 esv174687  | 4 | 180000 gain   | AABB | 18.9151 |
| Score=0.9; Score=270 esv270725  | 3 | 620000 gain   | AAB  | 8.13278 |
| . Score=274 nsv513763           | 3 | 280000 gain   | AAB  | -1      |
| Score=0.9; Score=964 esv24353,u | 3 | 20000 gain    | AAB  | 9.15435 |
| Score=0.9; Score=162 nsv10003   | 3 | 10560 gain    | AAB  | -1      |





















































2675278,nsv4694,esv2729955,esv2729948,esv1361510,esv2730020,nsv4859,esv2729783,nsv818335,nsv499762,dgv6062n71,nsv881076,nsv462210,nsv485

416123.2,ENST00000523087.1,ENST00000409948.1,ENST00000368268.2,ENST00000449449.2,ENST00000518273.1,ENST00000472914.2,ENST0000041  
'9,esv2666897,esv1003005,esv2732609,esv2732942,esv2732939,esv267507,nsv830801,esv2732571,nsv464075,esv2668901,nsv349422,nsv886509,esv273















































































































31,nsv830209,nsv525360,esv2526226,esv2730260,nsv4708,esv2730131,nsv881153,esv2665095,nsv881022,esv7370,esv2729669,nsv880361,dgv1771e1,ns'

l4028.2,ENST00000430428.1,ENST00000392282.1,ENST00000520886.2,ENST00000369220.4,ENST00000422023.1,ENST00000452675.1,ENST00000264  
i2377,nsv511325,esv2732912,esv1791114,esv275229,esv2658177,esv1113556,esv2656633,esv2732502,nsv349212,nsv886161,esv32969,esv2663486,esv2















































































































v517060,nsv471724,nsv830267,esv2729892,nsv4802,esv23114,dgv108n17,nsv819474,esv2730278,esv2586588,esv28799,esv1988123,esv2729879,esv9910

.839.7,ENST00000392348.2,ENST00000362224.1,ENST00000528577.1,ENST00000438797.1,ENST00000283977.4,ENST00000490177.1,ENST000003565:  
:72696,nsv886676,esv2660189,nsv823728,esv2732877,nsv522813,dgv6938n71,esv2732351,nsv511898,nsv830841,esv2669946,esv2732291,esv2057606,ns

















































































































019,esv2449363,dgv5998n71,nsv4800,esv2393790,nsv4796,esv28441,nsv526042,nsv823069,essv19140,esv2729876,nsv830214,nsv880530,esv2729935,ns

35.4,ENST00000525849.1,ENST00000368961.5,ENST00000265198.4,ENST00000456137.2,ENST00000424296.2,ENST00000506649.1,ENST0000040863;  
v830743,esv2663059,esv268396,nsv517329,nsv349993,esv2732560,dgv1972e1,nsv348864,esv269648,esv2600122,esv2671329,nsv520330,esv2069832,es















































































































v820142,nsv4798,nsv4704,esv2671278,esv1264464,nsv442950,esv3407,nsv881586,dgv6024n71,dgv1778e1,nsv10700,nsv513220,nsv462187,esv1398165,c

2.2,ENST00000392587.2,ENST00000302071.2,ENST00000530481.1,ENST00000602399.1,ENST00000391285.1,ENST00000370050.5,ENST00000367598.1,  
v2662175,dgv1060e201,nsv516738,esv2666990,nsv514369,esv27575,esv2670835,nsv524944,esv32923,esv2732886,esv2662356,nsv510058,nsv5440,nsv8















































































































lgv6027n71,dgv1011e199,esv2729858,esv274597,nsv881027,esv2107734,nsv471740,esv29149,nsv511306,nsv881577,dgv705n27,esv2730198,esv2674155

5,ENST00000529453.1,ENST00000417502.1,ENST00000392482.2,ENST00000411390.2,ENST00000461487.1,ENST00000437067.1,ENST00000369070.1,  
30833,nsv442016,nsv510937,nsv463999,esv2732689,nsv5427,nsv520490,nsv5372,esv2732725,nsv5375,esv2422431,esv2676114,nsv514378,esv















































































































i,esv1966970,dgv946n67,esv2674555,esv32808,esv1124892,nsv527103,esv2730023,nsv881311,esv274670,esv

ENST00000369123.3,ENST00000589192.1,ENST00000459080.1,ENST00000367748.1,ENST00000520034.1,ENST00000452973.