chr ins.start ins.end amp.name fwdp.seq revp.seq fwdU.seq revU.seq insert.seq fwdMaxTm revMaxTm fwdNumTBlock revNumTBlock pass gc\_count fwd\_e2e rev\_e2e total\_reads fwd\_reads rev\_reads N\_barcode Panel fwdp.mean.map fwd.min.map revp.mean.map revp.min.map ins.mean.map ins.min.map fwdpvsp\_mq fwdpvsp\_a1 fwdpvsp\_a2 fwdpvsi\_mq fwdpvsi\_a1 fwdpvsi\_a2 revpvsp\_mq revpvsp\_a1 revpvsp\_a2 revpvsi\_mq revpvsi\_a1 revpvsi\_a2 total\_e2e strand\_bias class

chr11 111959562 111959718 AMPL7153688075 GAACATGAAAGATGTGTGTTTCTCACATC CTTGCCAGTGACCATGAAGAGT GAACATGAAAGATGUGTGTTTCTCACAUC CTTGCCAGUGACCAUGAAGAGT ACTTTTATGAATCTGGTCCTTTTTGTAGCTGGCTCCAAGGCTGCATCTCTCCACTGGACTAGCGAGAGGGTTGTCAGTGTTTTGCTCCTGGGTCTGCTTCCGGCTGCTTATTTGAATCCTTGCTCTGCGATGGACTATTCCCTGGCTGCAGCCCTC 38 26 7 3 1 81 1 4 11 2 9 1 IAD50743\_124\_primers\_U.txt 1 1 1 1 0.3000000526 0.166667 0 0 0 44 58 0 0 0 0 44 44 0 5 3 0

chr6 348256 348353 AMPL7158989054 AGAGACAGCTCCAGGAGTTTGA TTTCAACTCCAAACGCCATGATG AGAGACAGCUCCAGGAGTTUGA TTTCAACUCCAAACGCCATGAUG AAGCATGAGGTCCATCAGGTAAGCAGTTCTTAGGGGACATCAGAGATGCAGGCAGGTGCCCCTGAACGGTGCCCACAGTCTTTCCGTACACAGCCAG 28 40 2 4 1 55 688 783 1568.5 740 828.5 2 IAD90522\_185\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 44 0 0 0 0 0 0 0 1471 95 2

chr10 104358989 104359212 SUFU\_Exon\_08\_NM\_016169.3\_100\_1.480028 GGCTTCTACAAGAATGGTACTCTTCC GTTGATCTCGAGTCCTCTCCTCAG GGCTTCTACAAGAAUGGTACTCTUCC GTTGATCTCGAGUCCTCTCCUCAG ACCCAGAGCTTCTTAAGAGCGCGGTTGTCCCCTCGCAATCTGTACTCACTCAGCGCTTACATCTGGATGCGTAGAGTGGGCTCAGGACTGGCCAGCGTGGTAGTTTTTCTTAGCACCTCTGCTGAGCCAGGTTTCAAGAGCGGGGTGAGAATTGCTGGGAGCCCACTGGGCCACTGGGCAACTTAGTGGTGTCGTTGCAGACACAGAGCAGATCCGGGAGACC 40 36 6 7 1 127 246 258 556 273 283 1 WG\_IAD76304.3-3pool.20150708\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 48 0 504 12 1

chr11 120989099 120989273 AMPLP806494587 CGCTGTCTGGATTTCAACAATGAGA GCTGGAAGTCTGCAAACACTGT CGCTGTCUGGATTTCAACAAUGAGA GCTGGAAGUCTGCAAACACUGT CTACTGCCAGGAGGCTTCCTGTAGCCCCTACGAGGTGTGCGAACCCAAAGGCAAATTCTTCTACTGCAGCGCTGTGGAGACCAGCACATGCGTGGTGTTTGGGGAGCCACACTACCACACTTTTGACGGCTTCCTCTTCCACTTCCAAGGCTCCTGTGCCTACTTGCTGGCCCG 32 30 5 4 1 0 100 1304 168 246 453.5 2 IAD78091\_236\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 50 0 0 0 0 44 44 0 1404 1204 2

chr2 179527202 179527410 AMPL7154034894 ACTTAGGTTAATGAAGAGGAATGGACTAAAAT CCTCTGCTAAGAAAAACTTATCGTCTGTAC ACTTAGGTTAAUGAAGAGGAATGGACUAAAAT CCTCTGCTAAGAAAAACUTATCGTCTGUAC GTTTTCAGGAATGGAAGAGAGATTTCTTCTGCAGGATAAGGTTGAGCTGACATGTACCTGTAACTGCGGGGGCTTCTGGTTTTTTGATTGGTGCCTTGGGAATTTTCTTTTCTGGGACAACTTCTTGAGCAGCTTCAGGCACTTGAAAGATATTAGTATTTTTATAATTTATGAATGGTGAAGGTATATATTACAGTGATTGTGAGGG 42 48 5 8 1 82 0 0 0 0 0 2 IAD62412\_182\_primers\_U.txt 0.333333 0.333333 0.4166665 0.333333 0.3055555 0.166667 0 0 0 1 64 64 0 0 0 1 60 60 0 0 0

chrX 133547586 133547696 AMPL7154564590 AGCCCTCATCACCTAAAAGTAAAAAGAAA TGCAACAAAAGTAAGAATCCAACAGTTTTT AGCCCTCAUCACCTAAAAGUAAAAAGAAA TGCAACAAAAGUAAGAATCCAACAGTTTUT GTCGCAAAGGAAGGCCAAGAAAAACTAATTTTAAAGGGCTGTCAGAAGATACCAGGTCCACATCCTCCCATGGAACAGATGAAATGGAAAGTAGTTCCTATGTAAGTAAA 28 42 4 3 1 45 258 254 573 283 290 1 IAD59467\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 58 0 0 0 0 0 0 0 512 4 1

chr1 112302153 112302219 AMPL5585872490 GGACCCCATTATCACAAGACAAAAC GTTATATTAAAAGTGTGTAGTTCCTTAAAAGCC GGACCCCAUTAUCACAAGACAAAAC GTTATATTAAAAGUGTGTAGTTCCTUAAAAGCC AGACTTAAAAAGTGTCATATTGCTGTTGGATCTCCTGGTAAGATAACAATGCCTGTTGGTAACCAG 36 32 2 8 1 27 509.5 495.5 1027.5 518.5 509 2 IAD43714\_86\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 50 0 0 0 0 0 0 0 1005 14 2

chr1 27101322 27101547 AMPL7154392915 CGAACAGATGAAATGCTGCACA GACCTGCCTTCTGCATTTTCATC CGAACAGAUGAAATGCUGCACA GACCTGCCTUCTGCATTTTCAUC AGATCAGAGGGCCAACCACGAAGGCTCGTGGCCTTCCCATGGCACACGCCAGCCCCCATATGGTCCCTCTGCCCCTGTGCCCCCCATGACAAGGCCCCCTCCATCTAACTACCAGCCCCCACCAAGCATGCAGAATCACATTCCTCAGGTATCCAGCCCTGCTCCCCTGCCCCGGCCAATGGAGAACCGCACCTCTCCTAGCAAGTCTCCATTCCTGCACTCTGG 24 30 3 5 1 140 1.5 25 313 134.5 178.5 2 IAD59467\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 44 0 0 0 0 44 46 0 26.5 23.5 0

chr12 116408325 116408649 MED13L\_5.40251 ATTACAACACAGAAAAGCCATGCG GCATTTTCATCAGACTCATACCACTC ATUACAACACAGAAAAGCCAUGCG GCATTTTCAUCAGACTCATACCACUC CAGCCCAGTGATTCCATACTCCGGCTCTGCCCTGCATGAAGGTGAGCACTATCCATACAGGTCTTCTACTCACCATTGTTGGGGCTAAACCCATCTTCATTGGGGTAGTTGGCTGGAGCCACCTGGATGGTTGATGATGTTGGGAACACCAAGATGTGTGTACAAGAAGCATCTTGAGGGGTGTTGAGCTGAGATGACTGCATGTTCAGTGCAGTACTTCGGCCAAAAACAGAGCCCATTGTGACAGCATCTTTAAAGAAAAAAATAGAATTATATCAATCAATGAACAACCCCAGAAATGAGGTTTTCAGAGGGCCTGATCTG 48 42 2 5 1 152 0 0 16 10 6 1 WG\_IAD87644\_206.20160120\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr9 117788682 117788881 AMPL7154048825 AGTTTTTCTGGATTGGCACTCAGTA GGAGACAGCCTTTGCTGTCTATG AGTTTTTCTGGAUTGGCACTCAGUA GGAGACAGCCUTTGCTGTCTAUG gtacttaaatatttgttgatttaataaatTGCTGGATTAATGAGGAAGGAATGAAAGTTAGAGAAATAAACTGTAAATGTCAAGAAGGTCTCCATGGCTTTGTAGGCTCTACGTGCAGCCACTACTGTACCTGCTGTCCCACTGTACCCCTCCACCTTCAGCTTGTAGCGAGTCTTGGCATCTCCCACGCTGAACTTGT 32 34 5 5 1 86 0 0 0.5 0.5 0 2 IAD56329\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 44 0 0 0 0

chr5 112177928 112178117 AMPL7154394010 TCGATCTAATTCAGAAATTTCAGGCCAA CAGGGCTTAATTCTGATTTCACAGATG TCGATCTAAUTCAGAAATTUCAGGCCAA CAGGGCTTAATUCTGATTTCACAGAUG TGAAACAGCCCCTTCAAGCAAACATGCCTTCAATCTCTCGAGGCAGGACAATGATTCATATTCCAGGAGTTCGAAATAGCTCCTCAAGTACAAGTCCTGTTTCTAAAAAAGGCCCACCCCTTAAGACTCCAGCCTCCAAAAGCCCTAGTGAAGGTCAAACAGCCACCACTTCTCCTAGAGGAGCCAAGC 26 36 4 5 1 91 529 510 1131.5 587 544.5 2 IAD95001\_195\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 56 0 0 0 0 44 54 0 1039 19 2

chr9 79792666 79792805 AMPL7153318578 GACGTGTTGAACCGGTTCTTG GCGAGCAAGGTGCTCGAA GACGTGTUGAACCGGTTCTUG GCGAGCAAGGUGCUCGAA GGGACTATGTGGTGGACTTGGACACGTCCCAGCTCTCTCTGGGCATCTGGAAAGGTAAGGAGGCCGCCGCCGCCGCTCCCCGGCCTCTCGTGCTTCCCGGCCGTCTCGCTGCCCGAGCGGCGTCCTGCGTTCTCGGGGC 34 34 4 2 1 98 14.5 12.5 29.5 16.5 13 2 IAD50814\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 42 0 0 0 0 0 0 0 27 2 0

chr13 23910942 23911090 AMPL7155153634 CCGCCTCAAAATTTAAATGAAAAGAAACC GAAGTAGCAAAATCAGTTGATGATGGAATT CCGCCUCAAAATTTAAAUGAAAAGAAACC GAAGTAGCAAAAUCAGTTGATGATGGAAUT TTTCTGAGTCAACATATGCATTCTCAACTAGAATGAAGCTAAAGGGTTTTAACTTATCAATAATTGACATCTTAGTGATTTCATTTTGCATCAAGGCTTCATGAAGGTATTTGTAGCAAGCATTGGTGATATTCTCCTGGTACAGTGT 30 42 3 6 1 51 535 500 1098 553 545 1 IAD79382\_182\_primers\_U.txt 1 1 0.8333333333 0.5 1 1 0 0 0 44 58 0 0 0 0 44 60 0 1035 35 2

chr19 49133166 49133299 AMPL7153844200 TCAGGATTGCGCTCGCTT GGCAAGCGTCAGGACTGAG TCAGGATUGCGCTCGCUT GGCAAGCGUCAGGACUGAG CATGGGACCAGACGTGATGCTGGAAGGTGGGCGTCGTCACGGTTAAAGAGAAATGGGCTCGTCCCGAGGGTAGTGCCTGATCAATGAGGGCGGGGCCTGGCGTCTGATCTGGGGCCGCCCTTACGGGGCAGGG 30 28 3 2 1 85 697 641 1468.5 772.5 696 2 IAD53081\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 36 0 0 0 0 44 38 0 1338 56 2

chr1 43814973 43815061 AMPL7154369472 CGCTCTGCATCTAGTGCTGG TTCGGCTCCACCTGGTCCA CGCTCTGCAUCTAGTGCUGG TTCGGCUCCACCTGGUCCA CCTCAGCGCCGTCCTGGGCCTGCTGCTGCTGAGGTGGCAGTTTCCTGCACACTACAGGTACCGCCCCCGCCAGGCAGGAGACTGGCGG 30 28 6 4 1 62 0 23.5 23.5 0 23.5 2 IAD67652\_152\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 40 0 0 0 0 0 0 0 23.5 23.5 0

chr5 1257050 1257244 AMPL7154334455 CCCAGCGGATTTGAATCAGAC GACCCTTGGGTAGTCGCTT CCCAGCGGAUTTGAAUCAGAC GACCCTUGGGTAGTCGCUT CCGCCCCCAGCGCCACGTGGACCACCACAGCCTCGCCCACTGCAGCCTGGCTGCCGTGAAATCGGGGCCCAGCTCTCCGTTCTCCCACTCCTGCCTCGAGGGAAGGGGATTCCTGGGCCTTCCACGTGCCTGACTCTGTGTTTGGAAACGGCCCGTGGCCCATCGCATCTCGGCCTCCTCAGGGCTACCCAATC 32 34 2 4 1 131 549.5 501.5 1255 661.5 593.5 2 IAD57799\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 42 0 0 0 0 44 38 0 1051 48 2

chr3 4878419 4878642 AMPL5360464593 TGTTTTTACCTCTAGAAGTGACTCAGT GGGATAGTGATGGGAGGGTAG TGTTTTTACCUCTAGAAGTGACUCAGT GGGATAGTGAUGGGAGGGUAG ttttttttttttttttttttttttAATGTGGATTCTAGGAAAGAAACCTTGACTGGTTCCCCAGGATGAGAGCCATGTCATTGGTCAGCAGTGATTCTGAAGGAGAACAGAATGAGCTGAGAAACCTGCAGGAGAAGCTGGAGTCCACCATGAAACTTGTCACGAACCTTTCTGGCCAGCTGTCGGAATTAAAGGATCAGGTAAAGAAAGAAAATCCCAGCGC 32 30 5 4 1 95 4 18 165.5 25 140.5 2 IAD43081\_92\_primers\_U.txt 0.3190475385 0.047619 1 1 0.5009259267 0.00277778 0 0 0 0 0 0 0 0 0 0 0 0 22 14 0

chr2 179523822 179524033 AMPL7153028286 CTTTGGCACCTCTGGGACTTTAA CTTTTTGATGTGCTGCTGGAAAATATTT CTTTGGCACCUCTGGGACTTUAA CTTTTTGATGTGCUGCTGGAAAATATUT GATATTAGTATTTTCATTATTAGACAAAGTAAAGACAAACAAACAATATCAAACACAGCAACAAGAGGGTGTCTACCTTTTGTGGGTGGCACTTCAGGCTTTTTAGGAGGAGGCACTGGCACTTTCTTTTCAGGAACAACTTCTTTGGGAGCCTCAGGCACTTGAAAGATATTAGTGAAATTACATTTAGGCATTATGAAGACCACTAGAA 32 36 4 7 1 80 0 0 0 0 0 2 IAD51407\_124\_primers\_U.txt 0.2916665 0.25 0.09733738133 0.000100422 0.1978071053 0.1 0 0 0 1 46 46 0 0 0 0 0 0 0 0 0

chr17 29553438 29553635 AMPL7161498072 AAAATTACCCAAGTTGCAAATATATGTCTTCC TGTGTTATAGTTGGGCAAGAGGTTATG AAAATTACCCAAGTUGCAAATATATGTCTUCC TGTGTTATAGTUGGGCAAGAGGTTAUG CCCTTGACTCTCAGGATAGTGCAGCAGGATGCAGCGGAACCCCCCCGATTTGCCGACAAGCCCAGACCAAACTAGAAGTGGCCCTGTACATGTTTCTGTGGAACCCTGACACTGAAGCTGTTCTGGTTGCCATGTCCTGTTTCCGCCACCTCTGTGAGGAAGCAGATATCCGGTGTGGGGTGGATGAAGTGTCAGTG 36 40 7 6 1 109 236 271 541 246 295 1 IAD91369\_238\_primers\_U.txt 0.2 0.2 0.3888888333 0.166667 0.3088889333 0.166667 0 0 0 0 0 0 0 0 0 44 54 0 507 35 1

chr6 33143354 33143514 AMPL7153510916 AGAACCCTCATCCCATCACCTT CACTGTTGCCCATTTCTCCTCT AGAACCCTCAUCCCATCACCUT CACTGTUGCCCATTTCTCCUCT TCGCCCATGAGCCCTGGGGGCCCAGGGTCTCCAGTCGGTCCAGTGCGTCCCTTTGGCCCCTCAGGACCATCCTCTCCCCTGGAACCAGGGACTCCAACTTCGCCCTGTGTGAGAGGGAAGGACAGGTGAGTGCTGGGGACTGGAGGTGGGCTCTGGGCCC 30 38 4 5 1 108 527.5 490 1328 651.5 676.5 2 IAD73228\_182\_primers\_U.txt 1 1 1 1 0.9 0.5 0 0 0 44 44 0 0 0 0 0 0 0 1017.5 37.5 2

chr3 151915411 151915630 AMPL7156621228 GGTTTGTGACTCAGATGTCATTCC TTGTGGTAATTTTGTCTTGTGACAGGTATA GGTTTGTGACUCAGATGTCATUCC TTGTGGTAATTTTGUCTTGTGACAGGTAUA AATAGGGTTATTTTGTGTTGCTGCTCAGTTTTAAACTCTTACTACTTAATCTCTGAAGATGAATAATAGTCTACTTCAGATCCTTCATCCATTTTGAGACTTTCTTTCAAACAAACTACACAAATGATAAATCAAACTAATGTATATTAGCAATCATTTATGATTTCAACATGCATCCTATAACTGTACTGAGTGGTGATGATGAAAATAATAAGAAAA 30 38 6 9 1 64 801 818 1802 866 936 1 IAD46040\_182\_primers\_U.txt 1 1 0.8333333333 0.5 1 1 0 0 0 44 48 0 0 0 0 44 60 0 1619 17 2

chr13 32944566 32944754 223399434 CTAACAGTACTCGGCCTGCT GACCGAAACTCCATCTCAAACAAAC CTAACAGUACTCGGCCUGCT GACCGAAACUCCATCUCAAACAAAC GCTGGTATACCAAACTTGGATTCTTTCCTGACCCTAGACCTTTTCCTCTGCCCTTATCATCGCTTTTCAGTGATGGAGGAAATGTTGGTTGTGTTGATGTAATTATTCAAAGAGCATACCCTATACAGGTATGATGTATTCTTGAAACTTACCATATATTTCTTTCTTTTGATACAATTAAtttgttt 28 28 4 3 1 67 534.5 634.5 1393.5 706.5 687 2 BioRef\_BRCA\_WG.20130906\_primers\_U.txt 1 1 0.04699952007 0.000328407 0.479166625 0.166667 0 0 0 44 40 0 0 0 0 0 0 0 1169 100 2

chr1 215901407 215901587 AMPLP657961531 CATGCACGGTAGGGCTGTTAA GCCTGTAACTCCAAGGGTTCA CATGCACGGUAGGGCTGTUAA GCCTGTAACUCCAAGGGTUCA TGTAGGATCGTCGGGTCTCTCCTGGTAGACCACACGGTAATGGGAGATAATGCCATTGGGAGATTCTGGCTTTGTCCAATTCAACAGAACTGAATGAGCACTCGTGGCTTGAGCCCAAGGAGCTGGAAAATCTTGAGGTGGAGCTTCCAGAGTTTGTGTTAATGACCACAGACTCTCCAC 30 28 4 4 1 0 1985.5 327.5 250 708.5 378.5 2 IAD78091\_236\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 42 0 0 0 0 44 40 0 2313 1658 2

chr2 170076914 170077123 AMPL7153109424 TTCCATTTTGTCAGACCCTGACAT GTACATAAGTTCTCCTTCATCTCAGTTTCC TTCCATTTTGUCAGACCCUGACAT GTACATAAGTTCUCCTTCATCTCAGTTUCC AACAAGAACAATGCTGCATGGAAGACACGTGCCATTTATGAATACTCACCCACGAGCAGGATCAACAGTTATGCCAATTGGAAAGCCAACTCCAAGAGCTGTCCCATCATTGGCAATCAATGTTTTTCTGTATCTGATATCTCCGTGGAGTGTCAAAACCTATAGCATAAAATCACTTATTAGAACTGACTTTCATAAGGGGAACCAAA 26 40 4 8 1 85 272 237 547 298 249 1 IAD70196\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 509 35 1

chr2 48132833 48133039 AMPL7156754628 GACACTCGCCTGGGTCT TCTCCGTCTGTCTACCCGG GACACUCGCCTGGGUCT TCTCCGUCTGTCUACCCGG CGGTTGGCGGCTCGGACGGAGTTCATTTGCCGGGCTGAGGTGGCGGCGTTGGCGGAGGGACACACACACGCACACGCACAGCGAGCTTCggggcaggagaaaggggtggggagagtgggagaggggggaggaaggagagggggcgaggggaaggggagACGCTGAGGGCGGAGGGGGCGAGCGGGACCCCGAGTCCGGAGAAAGGC 30 22 3 5 1 146 6.5 0 45.5 30.5 15 2 IAD96347\_188\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 34 0 0 0 0 0 0 0 6.5 6.5 0

chr16 3832866 3832960 AMPL7154392799 TGGGTTACTTAAAGAAGTGGCATTCTG GGCTTCTCCCTTTTACTTACCTCT TGGGTTACTUAAAGAAGTGGCATTCUG GGCTTCTCCCUTTTACTTACCUCT TGCCCTGTGCCAACAGAACCAATTGTGTTTTGAATTCCACTAGCTGGAGACCCCAGGATGGCTATAACGACAAACAGACAGACAGACAAAAACG 42 34 5 5 1 44 726 732.5 1692.5 888 804.5 2 IAD59467\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 54 0 0 0 0 0 0 0 1458.5 6.5 2

chr10 88469642 88469864 AMPL7153085682 GGCTGTCCTTCTGGGTGTAAC GAGCCACTTCTTGGCTCTTGT GGCTGTCCUTCTGGGTGUAAC GAGCCACTUCTTGGCTCTUGT CCTCCCCGCTTGGTTCCAGGCCCCAGGCCTCTTCCTACAGCCCCGCAGTGGCCGCCTCTTCAGCACCTGCCACCCACACCAGCTACAGTGAGGGCCCCGCCGCCCCTGCACCCAAGCCCCGGGTTGTCACCACTGCCAGCATCCGGCCTTCTGTCTACCAGCCAGGTAAGAGGCAGAGCAGGAGGGGAGGCTGTCGAAAGCCATGGGCGGGCTCCAGGAGCC 28 28 6 4 1 153 0 0.5 1 0 1 2 IAD50025\_130\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0.5 0.5 0

chr16 2549775 2549973 AMPL5379929197 GACAGGCCCGTCAGTAGT TCCTGGAGGGATGCAGCTA GACAGGCCCGUCAGUAGT TCCTGGAGGGAUGCAGCUA GGAGCACAGGGACGCTCCTGGGGGCCTGCGGGCACAGCCTCACCCAGACCTTTCCCCCAGGTGTGTGGTGCTTACCTGTCCACAGACTGGAGTGAGAGAAATAAGTTTGGAGGCAAACTGGGCTTCTTTGGGACCGGAGAATGCTTTGTGTTTAGGGTGAGTGGGGCCAAGTGTCCCCAAACCCCCACGCAGACCCTG 36 36 2 3 1 118 227 279 602 305 297 2 IAD45154\_93\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 506 52 1

chr5 112178672 112178887 AMPL7154394014 CCTTAAGAAGAAAATTGGAGGAATCTGCT TGATTGGAAGTCTAGAAGGACTTTCAGA CCTTAAGAAGAAAAUTGGAGGAATCUGCT TGATTGGAAGUCTAGAAGGACTTUCAGA CATTTGAATCTCTTTCTCCATCATCTAGACCAGCTTCTCCCACTAGGTCCCAGGCACAAACTCCAGTTTTAAGTCCTTCCCTTCCTGATATGTCTCTATCCACACATTCGTCTGTTCAGGCTGGTGGATGGCGAAAACTCCCACCTAATCTCAGTCCCACTATAGAGTATAATGATGGAAGACCAGCAAAGCGCCATGATATTGCACGGTCTCAT 36 34 4 4 1 100 264 225 560 300 260 2 IAD59895\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 58 0 0 0 0 44 56 0 489 39 1

chr11 83182596 83182825 AMPL7153147192 GGAGAGACTACTGGAGGATGGAA AATCACCCTTGCAGGACAGTTT GGAGAGACUACTGGAGGAUGGAA AATCACCCTUGCAGGACAGTUT TACATTTTACCATCTCATAAAGAAATCCAAGCTCTTTTTGTTTTTCCTAGAGGAAAGAAAAATGACACTTACGAGGCACACAGGAGCCAAATTTATCAGGGAATTCAGATATCAAGTCGTCATTGATCCGATCCTTCATGGGCCCCAGGATAATCACCGGCCGGGTGTAGTTTACTGCAGAATGGGAAAGGAAGATGTAGGTAAAGAGAAAGAGTTGGAAACAACTGCA 28 32 3 3 1 95 519 566 1360 675 685 1 IAD66059\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 1085 47 2

chr2 217342838 217343163 SMARCAL1\_15.312977 GAAACCGTAAACAAGCCGTTGTC CATGCATGGTTCAACTGAGAATGA GAAACCGUAAACAAGCCGTTGUC CATGCATGGUTCAACTGAGAAUGA CATAAGAACAAGGAGGGTGGCCTCATTTTCATTAGTCTGGTGGTTCTGTGCAGGTTGTATTCACTGCAGCTCATTTCTCCCCAACAGGCCCCTGATTCAAGAGAAGATTAAAGTTCTGGCAGAAGCCGGGCTTTCTGAGACCAATTTTTCAGAAATGACAGAATCCACTGATTACCTCTACAAGGTAATGCCAGCACATGGCTCTTCACCCCTGGAGCAGAGGGAGGCATTAAGCTGTCTGCCAAGTCTTTGGGTCCTGAGTAGGAGGATGTGAATCACTCCTAGGGACCTCCCCCAGCCTAGAGCTGAAAACAATGGCCTGCAG 38 30 3 5 1 162 1 0 474 390 84 1 WG\_IAD76560.20150714\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 1 1 0

chr4 99871700 99871870 SP\_64.18602 CATTTTAAGTCCACTGAACCAGCATT CATTCTTTCCCAAACATCTCTCTCTGTT CATTTTAAGTCCACUGAACCAGCAUT CATTCTTTCCCAAACAUCTCTCTCTGUT agaccagcctagccaacatggtaaaaccccatgtctactaaaaatataaaaattacccaggcgtggtggcatgcacctgtaatcccagctactcaggaggctgagtcaggaaagtcacttgatcccaggaggcggaggttgcagtgagccgagattgtgccacagcactc 38 44 4 8 1 88 0 0 0 0 0 2 WG00043.3.20140613\_primers\_U.txt 0.0001654194538 2.42289e-05 0.03138273974 6.25156e-05 0.01160141106 5.84587e-06 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr3 47046761 47046979 AMPL7153407308 CAGGCGTGATGCACTACCT CCGGTCGGAGCAGTCAAA CAGGCGUGATGCACUACCT CCGGUCGGAGCAGUCAAA ATCCGCGTGGAGCCCTTCACCTCCCTGCACGTCCAGCTGCAAAGTGGCCGGTGCGGCCCAGGGGCTGGTGGGCAGACTAGGGGGCAGATAAGGGGAGGAGGCTGGTCCTCCCCACATCCTGGGCCCACCCCTGGCTCCCTTCTTCCCTCCAGCCACAGCATCTCCCTCCCTGTCTCCATTCTCCCCACCTCACCTTGGCCCCGTGCCCCTCCCCCAGC 22 28 3 2 1 150 64 428 588.5 143 445.5 2 IAD50463\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 38 0 0 0 0 0 0 0 492 364 1

chr12 56732044 56732214 SP\_27.17642 GCTCCCTGAACCCTAAATATTGGATC ATTTTGTGCTCATTCTTTCCTGGTTATG GCTCCCTGAACCCUAAATATTGGAUC ATTTTGTGCTCATUCTTTCCTGGTTAUG ACCTCATACTGGCTTCCCAGTTCTCCAAGTTCCTTCATGCGCATTCTCTCCCATGAAACCAGGACCATCCAGTTGAAATAATGTTGTTTCCAACTGAGAAAAAGAAGCCCGTTTATTCCTAATAGGGGGCATCAGGTAGGAATCAAACTTCATTGCAAACAGCTCACCAT 44 34 6 8 1 76 0 0 0 0 0 2 WG00043.3.20140613\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr4 114223861 114224059 AMPL7153071607 TGAGTGTGGCCTCCTATGTGAT ACATAACCAGCTTGGTCTCTGAAAAA TGAGTGUGGCCTCCTATGUGAT ACATAACCAGCUTGGTCTCUGAAAAA CTTTTCATCTTTTGTTTACTTTTGGTTTCAACTTGAACATTAATGATTTTTGTTTTTCCAGACTATTACAGAAAAACACAAACTAAATGTACCTGAGACGATGACTGAGGTTCTTGATGTTTCTGATGAAGAGGGTAAGACTTCTATTCAATCTTCTATGACACCTGTCATGTTCTTACACAAGGGCAAATTACCCTT 36 32 6 5 1 68 325 169 589 340 249 1 IAD60229\_185\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 494 156 1

chr15 44884431 44884513 AMPL7155723405 GATCGTAACACTGTGCCTGAGTA AGCCTTGAAACGGTAAGTTGGAATTAT GATCGTAACACUGTGCCTGAGUA AGCCTTGAAACGGUAAGTTGGAATUAT ccgagtgagacaccaagtctttaaacaaaaacaaaaaaGTCCATGCATGCCAACCAAGTGCAGATCAGTGAGAAAGAGCACC 32 40 6 4 1 36 547 470 1063 566 497 1 IAD58588\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 54 0 1017 77 2

chr1 100327839 100328054 AMPL7154599148 AAATGAGAAAAGTGGTGGAGGTTACA TGCAATGAGAGAATGGACTAATACACAAAA AAATGAGAAAAGUGGTGGAGGTUACA TGCAATGAGAGAAUGGACTAAUACACAAAA AGTTGTGGACCCCATTTTACGTGTTGGTGCTGATAATCATGTGCTACCCTTGGACTGTGTTACTCTTCAGACATTTTTAGCTAAGTGTTTGGGACCTTTTGATGAATGGGAAAGCAGACTTAGGGTTGCAAAAGAATCAGGTAATGTCAGCTTGCTTTCTTTTTCTTATTTAAAAAAATAAATGTAATTATCCTCTGTGATATAGATTTCAAAAG 30 36 4 4 1 77 602 740 1532 716 816 2 IAD69869\_182\_primers\_U.txt 1 1 0.2699579464 0.00218818 1 1 0 0 0 44 52 0 0 0 0 0 0 0 1342 138 2

chr17 1579593 1579820 AMPL7153328181 GGAATGGGATGGGTGAAAACCT GCTCTATCTGAAGGCAGAACAGGA GGAAUGGGATGGGUGAAAACCT GCUCTATCUGAAGGCAGAACAGGA CGGCTTTCCAACCAATGCACTGTGGTGGTATATACTGCCACTGCTTCCTCCGCTGTGATGTAAGGCCCGTCCTGTAAGGTGGACATGAAATTAGCCTCCCGCTACAGCCCGATCCTGCCAGAACAAGGTTCAGTCACAACTCTACAGTCCTCCCTCTTGCCCACTCCCCCACCACTCACACCCAGCCCAGCCTACTCTGCCCAACCTTCAGGTAGTTGTGCTGCCGC 28 46 3 4 1 130 235 255 559 269 290 1 IAD91552\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 44 0 0 0 0 44 48 0 490 20 1

chr19 50918883 50919031 AMPL7153016300 GGTGGCCTGGCCAGAAATAA GCGGCACTGATGATCACGTAG GGTGGCCUGGCCAGAAAUAA GCGGCACUGATGATCACGUAG CCCCTCCTTCCTGCCAGCTGGGCCCACTTCCTAcaccctcgcccccacccccgccacccacctgccctcacccacccgccaccccatctccacGCAGGATGAGGAAGCGGGACCCCGGGAGTGCGCCCAGCCTGGGCGACCGCGTCCC 28 30 3 4 1 111 0 3 4 0.5 3.5 2 IAD93167\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 40 0 0 0 0 0 0 0 3 3 0

chr11 113675313 113675499 AMPL5331404331 TGGAAGAACAAGTCAGTTTGTAATAGCA GTTTTGCCCTGTGCCTTTTCAT TGGAAGAACAAGUCAGTTTGTAAUAGCA GTTTTGCCCUGTGCCTTTUCAT AAAATTGTTTATTTTGCCTCAGGTACCATTTACCTCAGGAATTAATGTTTTTGCTCTATAGACTTAAAGAAAACACTTTACCTTGTACTCTTCCATATTCATGTCATCTGGACCAATTTCCTTCAGTTTCGCTTGAGCCACCTTCATAATGCTGATTGATCTGTGTGGGACAAAGTTCAGAAAGCA 34 28 4 4 1 69 223.5 266 542 240.5 301.5 2 IAD43035\_92\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 489.5 42.5 1

chr12 46245158 46245354 AMPL7154624032 CTTATTCTCCCAGCTCCACAGAT TGAGATCAGTGGACCTGGCAATA CTTATTCUCCCAGCUCCACAGAT TGAGATCAGUGGACCTGGCAAUA CCTCCCCCTAATAATGCAAGAGCTCCTAGCCCTCAGGTGGTCTATCAGGTGGCCAGTAACCAAGCCGCAGGTTTTGGAGTGCAGGGGCAAACTCCAGCTCAGCAGCTATTGGTTGGGCAGCAAAATGTTCAGTTGGTCCCAAGTGCAATGCCACCCTCAGGGGGAGTACAAACTGTGCCCATTTCGAACTTACAAA 24 36 4 4 1 104 264.5 242.5 665 320 345 2 IAD57799\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 46 0 0 0 0 44 46 0 507 22 1

chr15 91346738 91346840 BLM\_17.7457 ACGTACATTTACTCATCTTACTTCCTGT AAGTCTTCATCCAAAATCTTGTCAAGTA ACGTACATTTACUCATCTTACTTCCUGT AAGTCTTCATCCAAAAUCTTGTCAAGUA TCTTCTTATCAGGGAGTAAGAGTGCAAAAATCCAGTCAGGTATATTTGGAAAAGGATCTGCTTATTCACGACACAATGCCGAAAGACTTTTTAAAAAGCTGA 34 42 7 7 1 38 200 286 554 263 291 1 WG\_IAD68410.20150216\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 56 0 486 86 1

chr8 117875341 117875526 AMPL7153220262 AACATGAGAAACTCCAAAGTAAACAACAAC GAATGGCACGAAATGCAGGTTT AACATGAGAAACUCCAAAGUAAACAACAAC GAATGGCACGAAAUGCAGGTUT ACAAAAACCAAACAAGTTTAACAATACCTGGCCGAAAAGCCATCTTTATCTTAATGAATGCTTCATTACAGTCTGCAAGAAGGTATTTGGCTTTCCTGTGATAGATTCGAACTACTCCCAGTAAGAGATGTCCTGATGTCCGTAATGCCATTTTCACCTATGAATAAAACATTAATCATATTCCA 32 38 3 3 1 67 219 281.5 595.5 278 317.5 2 IAD49510\_124\_primers\_U.txt 1 1 1 1 0.875 0.5 0 0 0 0 0 0 0 0 0 0 0 0 500.5 62.5 1

chr10 69672151 69672371 AMPL7155636554 AGCTCAAGCCCTTGTTGGATTT TGAAAGCTTTACAGGGTTACAGCAAA AGCTCAAGCCCUTGTTGGATUT TGAAAGCTUTACAGGGTUACAGCAAA TGCATAATGTATCTGTTGTGGTTTTATTAGCTTACTTCCTCCTCCCTTTTTCTAACTCTTATTTTTCACCCTATTTTAGGTTCCATACCCCATGAAGTGCCTCAGATATTAATTAATAGAGAACCTTTGCCTCATCTGCATTTTGATGTAGAGCTTCTTGGAGACTGTGATGTCATAATTAATGAATTGTGTCATAGGTTAGGTGGTGAATATGCCAAAC 36 24 4 2 1 80 534 658 1305 593 712 1 IAD72320\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 52 0 1192 124 2

chrX 32632384 32632597 AMPL7152998822 GTGTATAGGTACTATACACAGAGTTTGCT TGTTCAGTAATAAGTTGCTTTCAAAGAGGT GTGTATAGGTACUATACACAGAGTTUGCT TGTTCAGTAAUAAGTTGCTTUCAAAGAGGT TCTAGTAGAAAGCACGCAACATAAGATACACCTACCTTATGTTGTTGTACTTGGCGTTTTAGGTCTTCAAGATCAGGTCCAAGAGGCTCTTCCTCCATTTTCCTTGTTCTTTCTTCTGTTTTTGTTAGCCAGTCATTCAACTCTTTCAGTTTCTGATTCTGGAGATCCATTAAAACTCTATGTAAACTGAAAATTTGAAAGAAGCCTATTATG 34 26 7 5 1 79 1 1 4.5 3 1.5 2 IAD48111\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 2 0 0

chr17 10471964 10472136 SP\_382.29850 GGCTGTAGTATGGTGGGTGTTAGA GTTTCTCTGTAGTTTCTCCAAGCAGTAA GGCTGTAGTAUGGTGGGTGTUAGA GTTTCTCTGTAGUTTCTCCAAGCAGUAA GCTGGAACAATGTGGGGCTGCAGCCAGAGAGCCGTTTTAATTTGACTTCAATGACTCAAAGATGTAGTTATTAAAGAATGCATTTCAggccgggtatggtggctcactcctgtaatcccagcactttgagaggccaaggcaggtggatcacttgagatcaggagcctggcca 30 36 7 7 1 86 0 0 0 0 0 1 WG00042.3.20140613\_primers\_U.txt 1 1 0.0351317814 1.19012e-05 0.08230832694 3.63934e-06 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr4 3215608 3215721 AMPL7153316708 CCTCAGTGCTTTGGACGGTT TGCCTGGAGATCCAGACTCA CCTCAGTGCUTTGGACGGUT TGCCTGGAGAUCCAGACUCA CACAACTGTGATTCACACGGCTTCCCCAAACGAAGGTACACGAGTGGGCATTCTGTGACTCGGTACTTCCCTTTAGGCCCTGTCCTGGCATTTGATCCATGAGCAGATCCCGC 30 32 4 3 1 62 271.5 220 535.5 289.5 246 2 IAD50814\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 40 0 491.5 51.5 1

chr2 21233415 21233627 AMPL7154973842 CCCAGGGCTGCTCTGTATTTTC TTACTCAGTGAGCCCATCAATATCATTG CCCAGGGCUGCTCTGTATTTUC TTACTCAGUGAGCCCATCAATATCATUG TACAAATTGATCAATATTGATGTGCTTCAGGTTTCTCTGTACGTTTTCCAGTACAACTATAATGGTTTGTCGATTCCTCTCAAAATATTCTTGCAAGGTCTCAAAAAATGGGAGGTTAATGGAGTGAACATCTTGGTTTTTATCATACTTTACAAAAGCAACAATTGTAAATTCTTGGGGCTTCTCAACGGCATCTCTCATCTCTAAAGCAT 30 48 5 7 1 75 633 602 1369 711 658 1 IAD73784\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 44 0 0 0 0 44 56 0 1235 31 2

chr1 155204929 155205157 AMPL7153133988 GGAGAAGCTGAGAGTGTGATCCT GTGGGTGGGTGACTTCTTAGAT GGAGAAGCUGAGAGTGTGAUCCT GTGGGTGGGUGACTTCTUAGAT CCAAGGCCCCCAACGCTGTCTTCAGCCCACTTCCCAGACCTCACCATTGCCCTCACCGGTTTAGCACGACCACAACAGCAGAGCCATCGGGATGCATCAGTGCCACTGCGTCCAGGTCGTTCTTCTGACTGGCAACCAGCCCCACTCTCTGGGAGCCCTCAGGAATGAACTTGCTGAATGTGGGAACAGATGGTCAGAGTCCCTCGGGGTACCTCCCATGAAACCCTC 30 32 4 5 1 135 304 184 653 314 339 1 IAD85518\_182\_primers\_U.txt 0.5 0.5 0.5 0.5 0.5 0.5 0 0 0 0 0 0 0 0 0 0 0 0 488 120 1

chr1 116916799 116916916 AMPL7153140503 AAAAACTGGCTGCTTCTAAGTGC GGATGACAACTCCAGTTGCCAT AAAAACTGGCUGCTTCTAAGUGC GGATGACAACUCCAGTUGCCAT AAGCCGGCTGGGCGGGCTGGTGCCAGAAAGGGTGTGTCTTCACTGCCCTAAGATGGCCTTTAAGGTATACTTTTGAGGGCTTTCTTGGGCCACTTTCCGTAAACACAGGATGCACCG 28 30 5 3 1 65 5 2 7 5 2 1 IAD59841\_185\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 7 3 0

chr3 47727515 47727734 AMPL7153232186 CTTGTACTGCTCAGTACCATGCT GGGAGCTTCATTTTATTTAACCTAACAACT CTTGTACTGCUCAGTACCAUGCT GGGAGCTTCAUTTTATTTAACCUAACAACT ACAGATGGAAGTGGTCCACTCACCAGTTATAATCAAACCATGATGCATAACTAGGAATAATAATGTGATTGGTCTGCTCTGTCACATTATCTTCCCCAAGGTCAACTGATCGACTCTGATCACCTTTGGCAGGATCTTCATCTTCCTATAGAAAAGAAGACAAAGTTCAAAGAAAGAAAGAACTACAGAGAGAGATATATATAACATCTCTTACACTTC 30 32 6 4 1 84 252.5 242 560.5 302.5 258 2 IAD49510\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 494.5 10.5 1

chr1 203275884 203276037 AMPL7153591774 GGTGTGCCAAAAGCAATACACTG GAAAATTTTATGGAAGCTGGAAAGATCCA GGTGUGCCAAAAGCAATACACUG GAAAATTTTAUGGAAGCTGGAAAGAUCCA CCACTAGAGAGTACCCTAGAGCTCTAGAATCCCCTCCCAacacgcacacacacacacacacacactctctctctcacacacacacactcagtcacacacacacacacacacacacacactctctcacatacacTTGTCCTGGAAGCAGGAAAG 46 42 4 4 1 79 4.5 2.5 24 12 12 2 IAD50274\_124\_primers\_U.txt 1 1 1 1 0.1134542492 1.19012e-05 0 0 0 44 46 0 0 0 0 44 56 0 7 2 0

chr3 43753274 43753442 AMPL851070538 CCTTGCTGATCAAGACAGACCA AAGTAAGGGTTCAGGGTTTTCTTGTT CCUTGCTGAUCAAGACAGACCA AAGTAAGGGTUCAGGGTTTTCTTGUT TTCCAGTTTGGATCAGAGCCTTGGGAGCAGCATTGACTCCCTTTAACCCTTTAGCTGGCCTAAGGATTGCAGGACCCTTTGGTGAGTGCTTATGTTCTAGGAAAGCAAAATGTTTGTAAGTTATGAGAAGAGCAGAATTCACTATTGTTAGTCAAAATCTTAAAAACA 36 38 3 5 1 68 638 602.5 1288.5 661 627.5 2 IAD43038\_95\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 44 0 0 0 0 0 0 0 1240.5 35.5 2

chr15 59961339 59961502 AMPL7153408284 AGGTGATGGATGTACTAATCACCCA TGTACATCCTTCTTGGTTTATCAGAACAC AGGTGAUGGATGTACTAAUCACCCA TGTACATCCUTCTTGGTTTAUCAGAACAC gtttgatcattatacaatgtatacacatatcaaaatatagctctgtatcccataagtatgtatagttattatgtgttaactaaaaataaataaataaaaaaaataaaattaaaGTCAATGGCTCTCAAAAATTACCTAATAAATGGTCTTGTAACAGCCAGAA 30 26 6 6 1 40 238.5 267 571 287 284 2 IAD49756\_124\_primers\_U.txt 0.5 0.166667 1 1 0.6743589231 0.1 1 50 50 0 0 0 0 0 0 44 56 0 505.5 28.5 1

chrX 54476622 54476844 AMPL7153478758 CAGGACCATTCTGGTTAGCTGT CCCAAGGTCATATAAGTAATAGGTGAAGAA CAGGACCATUCTGGTTAGCUGT CCCAAGGTCAUATAAGTAATAGGUGAAGAA AGTTTTGAGGGAGAATCTATCAACCCCTAGGAGACCTGTTAATACTCTTCTAGCCCCCTACCACAGAGCCTTGGATGTTACCTGGACCCAGTCTTTCTTCTCCTCCTCAGTCCTTGGGGTGGGGAATAAAAAAGAAAGATGTTTGGTTAGGTAGGCCCACAAAAAGCAATAGGagtggaagagcaggtgttttggagtcagaaagacctgggcttgaccctc 28 32 4 6 1 108 203.5 304.5 634 279 355 2 IAD48111\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 508 101 1

chr3 48896915 48897057 AMPL1672493786 CCAGGAACAACAACTACTTCTGCTT CACCTTTTTCTTGCCACTAACAGATG CCAGGAACAACAACUACTTCTGCUT CACCTTTTTCTUGCCACTAACAGAUG CAGATTCACCCACAGGAGAGGGCAACGCACCCATGACTGGGGAAAGTGGCTTCCAAGTTATGTTTTCCTCACCTCTTTCCCTCCGGAGTGAAGATATTTTTCAGCCATTCATATGTCATGAAATACATTCCACTAGCTGGGA 42 36 4 4 1 67 722.5 436.5 1639.5 854 785.5 2 IAD43038\_95\_primers\_U.txt 1 1 1 1 0.8333333333 0.5 0 0 0 0 0 0 0 0 0 44 50 0 1159 286 2

chr7 150674829 150675057 AMPL7153077176 CCCATTGACTCGCACTTGC CACCCGAAGCCTAGTGCT CCCATTGACUCGCACTUGC CACCCGAAGCCUAGUGCT GACGCACACGGCCCGGGCACGCCCCCCCATCCACACTCGGAAGAGCTCGGCCCGCCCCCAGAGCCCCCTCCCCGCTCAGCCCCCTCCCCCACTCACTCTGGCCCTCAAACTTGCGGATGATGGTGTCCAGGAAGGTGTTCTGCGGCGCGACGTGGCCCCTCCGCACCGGCATCCTGAGCCCATGGGCGGGCCGGGCGGGCccccacccaccccggcccggcccggccc 28 38 3 2 1 174 0 0 1 1 0 2 IAD50025\_130\_primers\_U.txt 1 1 1 1 0.8333333333 0.5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr17 41245461 41245600 AMPL7156571208 CATTTGTTAACTTCAGCTCTGGGAAA CAAATTGATAGTTGTTCTAGCAGTGAAGAG CATTTGTTAACUTCAGCTCUGGGAAA CAAATTGATAGTUGTTCTAGCAGUGAAGAG TATCGCTGTCATGTCTTTTACTTGTCTGTTCATTTGGCTTGTTACTCTTCTTGGCTCCAGTTGCAGGTTCTTTACCTTCCATGAGTTGTAGGTTTCTGCTGTGCCTGACTGGCATTTGGTTGTACTTTTTTTTCTTTAT 28 30 5 6 1 57 270 222 532 296 236 2 IAD80287\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 52 0 0 0 0 44 60 0 492 48 1

chr2 152550782 152550997 AMPL5665600779 GCTAACGTCCATCCAAGGTTATATT GGACAGGCTGGCTTCGG GCTAACGTCCAUCCAAGGTTATAUT GGACAGGCUGGCTUCGG ACAGCAACTTTGTGGCCACGTCTGAAAATAGGGGTGAATTACAAAGAAACTCACATCACTCTGGTTTTTGGCCACCTTCAAGGAGTGCAGCATCTTGGGATCGTCATTAATGCTGAGGACTCCAATCATTTTCCCTTTGTTTTTTTCATAGTCTTTCTTGTACATCACCTGCAAAGACATCACACATGCCAGATTCCACTCAAGAGGAAATGTCC 34 28 6 2 1 92 5 4 302 19.5 282.5 2 IAD44951\_93\_primers\_U.txt 1 1 0.75 0.5 0.8 0.5 0 0 0 0 0 0 0 0 0 44 34 0 9 1 0

chr17 41201075 41201254 AMPLP223384214 CATCCATAGGGACTGACAGGTG GGTAGAGGGCCTGGGTTAAGTA CATCCATAGGGACUGACAGGUG GGTAGAGGGCCUGGGTTAAGUA CAGTCTTGCTCACAGGAGAGAATATTGTGTCCTCCCTCTCTGACAGGGCACCCAATACTTACTGTGCCAAGGGTGAATGATGAAAGCTCCTTCACCACAGAAGCACCACACAGCTGTACCATCCATTCCAGTTGATCTAAAATGGACATTTAGATGTAAAATCACTGCAGTAATCTGCA 40 38 4 4 1 0 1230 702 322 1230 753.5 2 IAD73325\_236\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 1932 528 2

chr17 40474296 40474517 AMPL7153032946 AAATTAAATGCCAGGAACATGGAAAATCAA GATCTTTCCTTCCCATGTCCTGT AAATTAAAUGCCAGGAACATGGAAAAUCAA GATCTTTCCTUCCCATGTCCUGT AACTACCTGGGTCAGCTTCAGGATGCTCCTGGCTCTCTGGCCGACAATACTTTCCGAATGCCTCCTCCTTGGGAATGTCAGGATAGAGATAGACCAGTGGAGACACCAGGATATTGGTAGCATCCATGATCTTATAGCCCATGATGATTTCAGCAAATGACATGTTGTTCAGCTGCTGCTTTGTGTATGGTTCCACGGACTGGATCTGGGTCTTACCTGTC 50 30 4 6 0 109 252 259 547.5 270 277.5 2 IAD49134\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 511 7 1

chr7 107357374 107357439 AMPL7155177586 ACCAGAAACAATGTGTCTATTTCTGAAAGA TGTGAAAATGAGGCAGCATTATAATCCTAG ACCAGAAACAAUGTGTCTATTTCUGAAAGA TGTGAAAAUGAGGCAGCATTATAATCCUAG TAGGATTAATGATCATACAAATGGGTTAATCCTGAATTCTGGTTGTAAATCTGGTTACAGCATAA 30 52 6 6 0 21 0 24.5 1028.5 505 523.5 2 IAD67652\_152\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 60 0 0 0 0 0 0 0 24.5 24.5 0

chr13 20797268 20797429 AMPLP591399609 CGAACCTTCTGCTTTTTAATGTCCTCTA CAACCGGGATGCAAAAATGTGT CGAACCTTCTGCUTTTTAATGTCCTCUA CAACCGGGAUGCAAAAATGUGT GTCTTTGAAATCATTCCTCTTCTCTCCTCGCCTGAACTTGCGAGTGGTTTCGTGCCTGTAGTAGGCCACATGCATGGCCACCAGCAGCGCTGGGGTGGAGACGAAGATCAGCTGGAGGGCCCACAGCCGGATGTGGGACACCGGGAAAAAGTGGTCATAGC 38 30 7 3 1 0 92 1595.5 250 257.5 553 2 IAD78091\_236\_primers\_U.txt 1 1 1 1 0.8333333333 0.5 0 0 0 44 56 0 0 0 0 44 44 0 1687.5 1503.5 2

chr9 139407335 139407554 AMPL7154410421 CCCAAGAAAGCCACCACTTTAC CCAGACCAACATCAACGAGTGT CCCAAGAAAGCCACCACTTTAC CCAGACCAACAUCAACGAGUGT CTCCAGTCACGGCTTCCCAGGCCGCCCCCACCCCTGGCCCCACCCTCTCCAGCACAGGCTCCGCCCTCTCCAGCACAGGTCCCGCCCCTCCCACATAGGCCCCGCCCCCTCCAGCACAGGCCCCACCCACCCCTCACCTGTGTAGGGCAGCAGGCAGTTGCACTTGTACCCGGCAACGTCGTCAATACACGTGCCCTGGTTCAGACATGGGTTGGACGC -1 34 1 2 0 151 0 0 5 2 3 1 IAD100341\_236\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 44 0 0 0 0

chr5 131927650 131927838 AMPL7153195535 CTCACTGTTGGGATATTTTCCCAAC CTTTCTGAAGTCTCCTTGTATGTAAGAACT CTCACTGTUGGGATATTTUCCCAAC CTTTCTGAAGUCTCCTTGTATGUAAGAACT AAAAACAGCTTGAAGACTGGCTACATAGTAAATCAAAAGAAATTAATCAGACCAGGGACAGACTTGCCAAATTGAAGTAAGTTGCAACATTTGGAGATGTAATAGAAATCTCTTATTTCATGCTTACCTGTTTAATTGTTTTAAAATAATTTATTGTCATGAAATGGTATGTTATATTGATAAACTTT 24 32 5 8 1 54 1 0 1 1 0 2 IAD56082\_124\_primers\_U.txt 1 1 0.2352249438 0.0238095 1 1 0 0 0 44 50 0 0 0 0 0 0 0 1 1 0

chr1 207697170 207697385 AMPL5360839977 CCGCCCCTCAGTGCATTAT CAGCAACGCATGTCACTGG CCGCCCCUCAGTGCATUAT CAGCAACGCAUGTCACUGG CCTAACAAATGCACGCCTCCAAATGTGGAAAATGGAATATTGGTATCTGACAACAGAAGCTTATTTTCCTTAAATGAAGTTGTGGAGTTTAGGTGTCAGCCTGGCTTTGTCATGAAAGGACCCCGCCGTGTGAAGTGCCAGGCCCTGAACAAATGGGAGCCGGAGCTACCAAGCTGCTCCAGGGGTGAGTCTGACTGAGGCCTAGAAGGGCCCTG 28 32 3 3 1 109 3 2 386.5 170 216.5 2 IAD43081\_92\_primers\_U.txt 0.166667 0.166667 0.1966668 0.166667 0.1916668 0.166667 0 0 0 1 38 38 0 0 0 0 0 0 5 1 0

chr4 1807049 1807281 AMPL7153032078 GCTGAGAGTGGGCGAGTTT TTGTCAGTGGCATCGTCTGT GCTGAGAGUGGGCGAGTUT TTGTCAGUGGCATCGTCUGT CACACTCATGGTCCCTCTGCCTCCACTGCCAGGCTGACCCTGGGCAAGCCCCTTGGGGAGGGCTGCTTCGGCCAGGTGGTCATGGCGGAGGCCATCGGCATTGACAAGGACCGGGCCGCCAAGCCTGTCACCGTAGCCGTGAAGATGCTGAAAGGTGAGGAGGGGGCGGCCAGGGGTGCAGAGCAGGGCTGGGGGCGCCGCCGCCGCCTGACACAGGCCCCCCGCTCCGTGC 28 30 3 6 1 164 241.5 256 1132.5 526.5 606 2 IAD59467\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 40 0 497.5 14.5 1

chr14 23887461 23887691 AMPL5365730879 CGCTGAATGGCGTCCGT CCAAGGGATGATGTTGAGATTGG CGCTGAAUGGCGUCCGT CCAAGGGAUGATGTTGAGATUGG CATACTTGGTCCTCCACTGGGCCACCTCCGAGTTGGCCTTGGAAAGGACGCGCTGCAGCTCGGCCTTGGCCTCCGTCTCCTCCTCGTACTGCTCCCGCAGCAGGTCGCAGTCATGCCGGGCCGACTGCAGTGCGTGGGCCAGGGCGTTCTTCGCCTGGGGAGGGGTGGGCACCAGGAGGTGGGTTCAGCTTTCTCCATAAAGCAACCCCACCCTTGCCCTTCTCCTCACC 22 30 3 4 1 150 222.5 271 611.5 314 297.5 2 IAD44951\_93\_primers\_U.txt 0.361111 0.25 1 1 0.8333333333 0.5 0 0 0 44 34 0 0 0 0 0 0 0 493.5 48.5 1

chrX 70330329 70330563 AMPL5166240906 TGTCCCACAGTATCCCTGGT GATTGGCCCCACTGTTCCT TGTCCCACAGUATCCCUGGT GATUGGCCCCACTGTUCCT CTTGACCCTTTCTTTCCAAATTACCCAGATTCTGCAGTTTTAGCATCTGTGTGGCCTGTCTCCTGGGTTCCCGTGGGTCCTGGAGCTGAACAACAAATGTTTGGTAGAGGTGGATCTCCTTTTTTTGCAACTGACAGCCAGAAGTGATTTCTTCAGAGAATAGATAGTGGCTGCACTTCTGGACTTTATCATTATCCGAGTTCTTGTACCTAGAGGAGAAAGGTTGGAAGGAAG 32 38 4 3 1 106 210 275 558 234.5 323.5 2 IAD47675\_93\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 485 65 1

chr1 156811865 156811996 NTRK1\_2.2726 GCCTAGCTTAAGGGAGTCTCTCTA GCTGGTGAGATTGCAGACG GCCTAGCTUAAGGGAGTCTCTCUA GCUGGTGAGATUGCAGACG tTTTCAGGCCGCCCTCATCTGCCTGGCACCCTCTGTACCCCCGATCTTGACGGTGAAGTCCTGGGACACCATGCAGTTGCGGGCTGCTAGATCTCGGTGCACAAACTTGTTGGCAGCAAGGTAGGCCATGC 40 24 6 3 1 78 236.5 249 520.5 257 263.5 2 WG\_IAD92952.20160315\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 485.5 12.5 1

chr9 137534047 137534224 AMPL7153483927 CCGGCATGGACGTCCATA GGCCAAGGAAGAAAAGTTCTGC CCGGCAUGGACGTCCAUA GGCCAAGGAAGAAAAGUTCUGC CCGCTGGAAAGCGCGCAGCGCGCTCCGCCCGGGCGCCCCgctgctgcccccgctgctgctgctgctgctgTGGGCGCCGCCTCCGAGCCGCGCAGGTAAgggcgccccggggcgcggggctgcgggatggggcgcgcgcagcccgggcgccgcTGTCATCCCCGGGCGCCTTCGCCC 30 48 3 2 1 147 0 3.5 38.5 26 12.5 2 IAD94568\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 3.5 3.5 0

chr11 31824205 31824428 AMPL7153375516 GAAATGAAGAGAGGGCGTTGAGA TCCCTCTTCTTCCTCTTCACTCTG GAAAUGAAGAGAGGGCGTUGAGA TCCCTCTTCTUCCTCTTCACTCUG TGGAGGGCCGCGGGGGCGGCGAGTGGGGCGGCGCCGGGAGGATCACCTGCAGAATTCGGGAAATGTCGCACGGCCGGGCCCCGCTGTGAGCTAGCTCTACAATCTTCTGCCGGGTGGAGTCCGGCAGTGGCCGCCCGTTGACAAAGACACCACCGAGCTGATTCACTCCGCTGTGACCTGAGGAAAGGGAGaggagaggaaaggggaaaagaagagaagagag 42 34 2 7 1 143 248 245 546 261 285 1 IAD95822\_182\_primers\_U.txt 1 1 0.7950336667 0.030303 1 1 0 0 0 0 0 0 0 0 0 0 0 0 493 3 1

chr14 92668905 92669081 SP\_275.32247 GGTCCTGCCTGCTTCAGAT AACAAGTCAAGTGTTCTTTTCAATGTCAG GGTCCUGCCTGCTUCAGAT AACAAGTCAAGUGTTCTTTTCAATGUCAG gccaatgggttggatgtgcaggctgcagaaaagggaagaatcaaggctgtctcctgggggtggggcttgggcaacgggacaggggataggggtatggtgaggcctcatggagaggaagaggttcagagcaaaatcaagagttctgttctggaGTCTCGAAACAGTGCACTCTTTTC 24 34 4 6 1 95 0 0 0 0 0 2 WG00042.3.20140613\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr13 32905132 32905249 AMPLP223515418 GATAGATTTATCGCTTCTGTGACAGACA AAACCGAGATCACGGGTGAC GATAGATTTAUCGCTTCTGUGACAGACA AAACCGAGAUCACGGGUGAC TGAAAACACAAATCAAAGAGAAGCTGCAAGTCATGGTAAGTCCTCTGTTTAGTTGAACTACAGGTTTTTTTGTTGTTGTTGTTTTGAttttttttttttgaggtggagtcttgctct 26 26 6 2 1 0 41 1394 416.5 302.5 761.5 2 IAD73325\_236\_primers\_U.txt 1 1 0.4765150909 0.125 0.2009112783 7.9233e-05 0 0 0 44 56 0 0 0 0 0 0 0 1435 1353 2

chr11 66294145 66294236 AMPL7154639252 GTGGCCTGATCATCAAGATCCT CGCAGTGTCTGATCCACGTAAA GTGGCCUGATCATCAAGAUCCT CGCAGTGTCUGATCCACGUAAA AAGCGTACAGCAGTGTTTGTAGAGGGAGGAAGTGAGGTGGGTCCCCCACCAGCCCAGGCCATGAAACTCAATGTGCCCCGAAAGACCCGGC 30 30 5 5 1 55 1.5 1 2.5 1.5 1 2 IAD67652\_152\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 44 0 0 0 0 44 44 0 2.5 0.5 0

chr10 17147348 17147669 CUBN\_57.475131 TGAGAGTTCTCGACAGTTCCTTATCTG TCAAAATACACAGACTGGATGTTGGT TGAGAGTTCUCGACAGTTCCTTATCUG TCAAAATACACAGACUGGATGTUGGT AACTTGACTCATTATCTTGACATTCCTGAATCCTATAACGTTACATTTTATAGGCGTGAAACTAATTCTCAGGTACTCTCTGTCCACAGGAAAAACAAAGGACTCACGATGCATTGTCCATTTAGACAGGGGTGACTTAGGCAAATATTACTGAGCTGCACACATCCATTTGGCCCATAACCATTTCCAGTATAACCCGGGAGACACGTGCAGAGAGGTAAGGAACCTGTTCAGAAATAAAAACAAACGTGTAAATACAGGTCTCCTCCTCTGTTCGGATGCAGTATCTAAACTCAGAATCTGCTGTCTAGACAAGGATCC 44 40 6 4 1 135 0 1 329 189 140 1 WG\_IAD76560.20150714\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 1 1 0

chr12 40687121 40687335 AMPL7156838789 CAGTGTCTAGTCTGTAACAGCCAT AGAAATGAGCCTTCACTTCCTATTTTGAAA CAGTGUCTAGTCTGUAACAGCCAT AGAAATGAGCCUTCACTTCCTATTTUGAAA ctataaatatttatgggtgaagaaaAATGTTGTTGAATTTTTAAAGTGAAAAACCAACATGGCTTATCATCTCTATTTTAAAGATTTTACAAAGGGAATGGACTGTGAAATTTCCATTAATAAAAATAGGTCTAATCTTCCATGATTGAACTATGATAGAAGGATCTTATGATTGAGTAAGCTTTTTGTATTCACCTTCATGTTATTTTATCAT 26 34 6 5 1 58 267 225 534 281 253 1 IAD93843\_236\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 60 0 492 42 1

chr10 43611812 43611913 7154132788 CGAAGTACTGAGTCCAAGCCAT GACAAGTTCCAATGTGCAGAGAAC CGAAGUACTGAGUCCAAGCCAT GACAAGUTCCAATGUGCAGAGAAC CTGTGACCACACCTGTCATGTAGCAGCTTTCAGGGGCCTGGCTGTGGGGTCCTGCCCAGGGCAGAGACAGGCAGCGTTGCCGCTGGCTCAGATGACAGCCG 28 28 3 3 1 66 235.5 251 500 245 255 2 WG\_IAD54561.20140701\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 44 0 0 0 0 44 48 0 486.5 15.5 1

chr12 112890962 112891125 AMPL3692103964 TTTTGTGAAAGAACAACATGAACCCATA GCTCTCCCCTTTGTCATCACC TTTTGTGAAAGAACAACAUGAACCCAUA GCTCTCCCCUTTGTCAUCACC AGAGCTAAATTCTTTTTTATTTTTTAAAAACTTTAGGTGGTTTCATGGACATCTCTCTGGGAAAGAAGCAGAGAAATTATTAACTGAAAAAGGAAAACATGGTAGTTTTCTTGTACGAGAGAGCCAGAGCCACCCTGGAGATTTTGTTCTTTCTGTGCGCACT 46 32 4 5 1 60 255.5 231 742.5 328 414.5 2 IAD48187\_93\_primers\_U.txt 1 1 0.3888886667 0.333333 0.4743588462 0.25 0 0 0 0 0 0 0 0 0 0 0 0 486.5 24.5 1

chr10 55782770 55782992 AMPL7153108229 CAAAACCTTGATGGCCAAGGTT TTCATTTACAGTAGCCCGTCAAAACTTA CAAAACCTTGAUGGCCAAGGUT TTCATTTACAGUAGCCCGTCAAAACTUA GAGTTGAATGACGAGGGTGTACTGCTCCATCTGTTGCCACAACAACAAGTTCATAGTAGTCCCTGACTTCTCTGTTAAGCTTCACTGCTGTGTAAATGCTCCCATTGGATGTGATACGAAAAAGATTATTAAAGTTACCCAAACTGTAGTGCACTTGACCATTTATTCCAGCATCAGGGTCTGTTGCCTATTAAATAAAACAAAAAAACAAAAAAATTCACG 30 42 3 5 1 86 1.5 4 8.5 3.5 5 2 IAD51115\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 44 0 0 0 0 0 0 0 5.5 2.5 0

chrX 63412520 63412725 AMPL7154657863 GGCTTGGAAGGTCTCCTCAAAG GGCTCCAGATGTAAGACATCTGTG GGCTUGGAAGGTCTCCUCAAAG GGCTCCAGAUGTAAGACATCTGUG AGGGCACCTGAGGGGCTGAGCTCACGTGCTCATGAGGCCTGGCTCTGACCCTCTCAGGCCCCTTGGCCCCTGGCTCACTTTGCTCAGCCCCAGTGACCTTGCTCTTCCGGTGACGGCGGATACTGCTAAAAAAGCCTTTTAGGCCTTTCTTTGGCTTGGGCATAGAGGGAAACTTCTCAGCCACAGCTTTCTCTGTGGCTCCAGC 36 34 4 6 1 121 10 6.5 21 14 7 2 IAD85185\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 44 0 0 0 0 44 48 0 16.5 3.5 0

chr18 44190837 44190931 AMPLP808228922 GGCATCCAGGATGAACCTGT GACCATGAAGGCTTGGAAATTCTTTT GGCATCCAGGAUGAACCUGT GACCATGAAGGCUTGGAAATTCTTUT TTCAGCTCCCTTTTCAAAGTTGTCCTTTTCATTTTCTAGCCTACGCTCCCCTGTATGCACAGACATACAAAAGAAATTACAAAAAGACCAGAAG 36 38 3 4 1 0 890.5 245.5 270 541.5 256.5 2 IAD78091\_236\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 40 0 0 0 0 0 0 0 1136 645 2

chr11 47368168 47368284 AMPL7153036372 GATGAGGGTGCTGTGCTATGTT GCGGAAAATAGGGAGGAAGTAAAGG GATGAGGGUGCTGTGCTATGUT GCGGAAAAUAGGGAGGAAGUAAAGG GGCACTCACCTCGGGGTCCGGAAACTGCTGCTCCAGGGGTGGGGGTGGGAGAAAGGGTAGGTGGCACATGAGAGGTATGGCCACCTTCCCTCAAAGACCTGGACCCCACCCATGGG 34 32 7 2 1 75 275 236 539 295 244 1 IAD88051\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 511 39 1

chr17 29559051 29559267 AMPL7153006304 GGGAAGTGAAAGAACTTGAAAGATTCA CCTGTCATGGGTATTATTTCTTTGCTTTTT GGGAAGUGAAAGAACTTGAAAGATUCA CCTGTCATGGGUATTATTTCTTTGCTTTUT GGTCTCTAAAttttttttttttttttttttttttttCAGAGATTTGGACCAGGCAAGCATGGAAGCAGTAGTTTCACTTCTAGCTGGTCTCCCTCTGCAGCCTGAAGAAGGAGATGGTGTGGAATTGATGGAAGCCAAATCACAGTTATTTCTTAAGTAAATTTCAGTCACCAAAAAACATAAAGCAAAAAGCAAATAAAGCCCCCCACCACACAA 44 38 3 8 1 81 12 13 409 104 305 1 IAD68496\_188\_primers\_U.txt 0.4095238 0.047619 1 1 0.3362987043 0.00218818 0 0 0 0 0 0 0 0 0 0 0 0 25 1 0

chr6 32017229 32017424 AMPL7153177462 GCACGGTGAAGGAGTCGAAG TCATAGCCTTGGCTTCTCCCT GCACGGUGAAGGAGUCGAAG TCATAGCCUTGGCTTCUCCCT GGCCCTGGGGGACGGTCCAGGAGAGGCTCAGCGAGTCAGGGGAGGATCCTGTCACTGTCAACTCCCCCAGGAGCGGCTCCTCAGGGGCCTCCGGGGCCTCAGTGCTGGGTTCTGTGGGGCTGGGGGTCTCTTCCTCTGCAGTGGAGAAGGAGGGAGAGAGAGTGAGGGGGATGTCCTTGGGTCCTGGGGAAAAGG 22 24 2 4 1 130 2.5 2 432 188 244 2 IAD55055\_124\_primers\_U.txt 0.166667 0.166667 0.611111 0.333333 0.483333375 0.166667 1 38 38 1 40 40 0 0 0 0 0 0 4.5 0.5 0

chr12 34127657 34127829 SP\_26.18050 CTTGTAGGCAGTAGTTTGGTCTCAT GGGCCATGGTATTTAGTACACAATAGT CTTGTAGGCAGUAGTTTGGTCUCAT GGGCCATGGUATTTAGTACACAAUAGT ACATCTCAAAGAGATAGAAAAATTAGGAGGAATCATGGTCTATTTAAAAATTTTGTAAGCCAGAGGGGTATACGAAAGTCAAAGCAGGAGATCTAGGGCCTTATTTTTACTAGAGAATATgagagagagagaaaataagagagagagaataagagagagacaataagagaga 34 32 6 5 1 61 0 0 0 0 0 2 WG00043.3.20140613\_primers\_U.txt 0.5 0.5 0.64 0.2 0.6296296111 0.25 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr19 45873653 45873840 AMPL7153415149 CCTCAGTGTCTCCTCGCTATCA CGGCCTCTCGCTGAATATTCAT CCTCAGTGUCTCCTCGCTAUCA CGGCCTCUCGCTGAATATUCAT TGCTGCTCCCTGCGGCTGCCCCCGTCCCACCCCTTCACCCTCCCCTCGCCCCCTTGGGGACCCAGGCGCGCCCACCGATGACCCCATCTTCAAGACCCCCCGCGCCCGCTAGCGAGCGCGACCCCCAGCCCCCTTCTCACTTCATGGCGCCGGCCGGACTGTGCAGCGGGGTCGACCCGCCTCCCTC 32 28 7 5 1 140 0 37 49 6 43 1 IAD52270\_130\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 37 37 0

chr2 47646797 47646971 AMPL7156620954 TTAAAAGAAATGAGATTTTGTCATGGTTAGCC AATTCGACTGTTTAAATAAAGTACAAAAAGGAA TTAAAAGAAATGAGAUTTTGTCATGGTUAGCC AATTCGACUGTTTAAATAAAGUACAAAAAGGAA ggtttcaaactcccaagctcaagtaatccaccttcctttgcctcccaaagtgctaggattacaggcatgaaccactacacccgATCTGTACTGTTCCTCTTTCCATTCACTAAAACCTACTTGCAACTATGAGCATATGTTATTGCCATCTAGAAATGAGTTTCTAGGGACTTG 36 28 6 5 1 75 837 857 1757 880 877 1 IAD46040\_182\_primers\_U.txt 1 1 1 1 0.1115549564 1.50836e-05 0 0 0 0 0 0 0 0 0 0 0 0 1694 20 2

chr2 220283652 220283883 AMPL7153579754 AGTGGCCGAGCTCTACGA GGAGGACCCTTTCTCCACATG AGUGGCCGAGCTCUACGA GGAGGACCCUTTCTCCACAUG GAGGAGCTGCGGGAGCTGCGGCGCCAGGTGGAGGTGCTCACTAACCAGCGCGCGCGCGTCGACGTCGAGCGCGACAACCTGCTCGACGACCTGCAGCGGCTCAAGGCCAAGTGAGGGCCCGGCACCCCAGACTCCTCTTTCTGCGGGCAGGGCACAGGAGGCTAGGCCTGGGGTCTGGGGTCCCGCTGTCAGCACCTGCCTTCTCCCGGGGCCCGGGACCCTCTCCTGCCC 36 32 3 3 1 166 270 238 607 316 291 2 IAD56845\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 36 0 0 0 0 0 0 0 508 32 1

chr4 55565727 55565947 AMPL7153002819 ACAAAGTAAGCTGTACACATTTGAGGA CCACAGAGACAGAACATGAGAAGAATG ACAAAGTAAGCUGTACACATTUGAGGA CCACAGAGACAGAACAUGAGAAGAAUG AAATGGTAAATCAAAATTTCATGCTATAATACAAATTATTTGAGGGGCCACATTTCTTTTCATTCTAGCCTTCAAAGCTGTGCCTGTTGTGTCTGTGTCCAAAGCAAGCTATCTTCTTAGGGAAGGGGAAGAATTCACAGTGACGTGCACAATAAAAGATGTGTCTAGTTCTGTGTACTCAACGTGGAAAAGAGAAAACAGTCAGGTGAGTGAATCGCTT 30 48 4 2 1 87 216.5 295 593.5 269.5 324 2 IAD49522\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 511.5 78.5 1

chr4 147560335 147560549 AMPL7154359205 GCAAGCAGGCGTTTAGCATG GAAGACAGGCTCTCCGCATA GCAAGCAGGCGUTTAGCAUG GAAGACAGGCUCTCCGCAUA CGCACGGCGGCAGCCTGCACGTGGAGCCCAAGTACTCGGCACTGCACAGCACCTCGCCGGGCTCCTCGGCTCCCATCGCGCCCTCGGCCAGCTCCCCCAGCAGCTCGAGCAACGCTggtggtggcggcggcggcggcggcggcggcggcggcggcggaggccgaagcagcagctccagcagcagtggcagcagcggcggcgggggcTCGGAGGC 38 32 2 3 1 167 16 18.5 80 56.5 23.5 2 IAD60802\_182\_primers\_U.txt 1 1 1 1 0.3978522825 0.00352113 0 0 0 44 40 0 0 0 0 0 0 0 34.5 2.5 0

chr17 32731529 32731695 SP\_399.6580 ACTTTTTAAACACATTGCCTAACAGAATT CTGGGTCTACTCCAGCAAATAGAAAAT ACTTTTTAAACACAUTGCCTAACAGAAUT CTGGGTCUACTCCAGCAAAUAGAAAAT CCCAACCCCCACTTGGAGAATAGAGGTCAGGTCTGCTGTATCAACTGTCCTATCTTGAATGCTGGTAGTTGTAATAGAGTGAACGAGAGCTGTATAGGGTCTTATACCAGCAATAGATGCTTCgcccagaaataacacatcacttccactcatatttcactgttca 34 32 4 5 1 74 0 0 0 0 0 1 WG00042.3.20140613\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr13 28885662 28885772 FLT1\_4.57553 TCTCTCTTTCGTCTTTCTTTCTCTTTCG CTTCTCTGAGGACTTCTTCAAGGAAA TCTCTCTTTCGUCTTTCTTTCTCTTUCG CTTCTCUGAGGACTTCTUCAAGGAAA ctttctttccttctttttttTGTTGGAAAATTCTGTGATATAAAGTTTGAGAAAGAAATCTTACCTGACATCATCAGAGCTTCCTGAATTAAACTTCGGAGCTGAAATAC 34 30 8 5 1 36 281 219 562 285 277 1 WG\_IAD68410.20150216\_primers\_U.txt 0.5566666 0.2 0.5 0.5 0.75 0.5 0 0 0 0 0 0 0 0 0 44 52 0 500 62 1

chr12 2789544 2789734 AMPL7153846152 CTCTAGGATGCACTGCTGTGA AGCATGTCAAGAACCTGGCAT CTCTAGGAUGCACTGCTGUGA AGCATGUCAAGAACCUGGCAT ATGCTGGATGGTGGGACCTTCCCTCCCGCCCTGGGCCCCCGCAGGGCTCCTCCCTGTCTGCATCAGCAGCTCCAGGGTTCCCTGGCGGGGCTGAGAGAGGACACACCCTGCATCGTGCCTGGCCACGCTTCACTGTGCTGCTCTTCCAGAGTAGGAGAGTGGCTCCCAGCAGGCTGCACAGCCCCCCAGC 30 24 6 3 1 129 8.5 17 28.5 9.5 19 2 IAD55926\_124\_primers\_U.txt 1 1 0.8333333333 0.5 0.8636363636 0.5 0 0 0 44 42 0 0 0 0 44 42 0 25.5 8.5 0

chr11 6520070 6520202 AMPL7153471752 CTCAGGTGGCCCTAGAAGAG TGCTCAAGCCCTAGACTGAGT CTCAGGUGGCCCUAGAAGAG TGCTCAAGCCCUAGACUGAGT CTGTGTGGCTGGATGGACTTAGTCTCCTTCCCTTGGCACTGGCAGCGGACATCCCTGTACGGTATGAAAGCAGTGACACTGACAATGCAGAGGTGGAGCCTGTTGGAAGAAAAGAGACCAGGTAAGTGAGGG 20 36 3 3 1 72 541 470.5 1064.5 571 493.5 2 IAD52640\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 40 0 0 0 0 0 0 0 1011.5 70.5 2

chr2 26684532 26684655 AMPLP3673342072 CCTGCCTCTTCTCAGTTCTGGA GTCATCTCCAAGAAGGAGTCCAT CCTGCCTCUTCTCAGTTCUGGA GTCATCUCCAAGAAGGAGUCCAT CCTGAACCCCCATCCCTGCCCTGCTCTGCACCCAGGAAGTCGTCAGCGGAGAAGTGGTCCGCATCCCAGATCTGCAGGGTGAGCCGCGCGGGGATCTTGTACTCGGTCTCGTCCCAGGAGAAC 28 34 6 4 1 0 955.5 236 168.5 429.5 244.5 2 IAD78091\_236\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 46 0 1191.5 719.5 2

chr8 67968747 67968950 AMPL7154423448 TGCCTGGCCCAGATATGTTTTTAAAT GAAAGCTCCATAGAAAACATGTTTTTCTCA TGCCTGGCCCAGAUATGTTTTUAAAT GAAAGCTCCAUAGAAAACATGTTTTTCUCA ACTTACTGTTTGCAGTGTACACCAAAATCTTCTATTTTATTAAGTGGAATAGTCTGGTACTCAGAAGGTCCTTCATCAGGAGGTTTGTAGCCCTAAACAAAAATGAGGTAAACAGAAGATTAAGAAAAAAAAAAAAAAAAatatatatatatatatatatatatatatatatatatatatatatatatatatatatataAAAA 44 40 4 5 1 45 0 0 2 1 1 1 IAD91537\_182\_primers\_U.txt 1 1 1 1 0.2038503997 7.40905e-06 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr1 202709764 202709867 AMPL7156129966 GCGCCAATATTGCTCTTTATGGA GATCCCTGCATATCTGCCCAAT GCGCCAAUATTGCTCTTTAUGGA GATCCCUGCATATCUGCCCAAT GCACTTACACATTCTGTATATACTTTTTAAAACCAACCTGCAGGCCCTCTACATCCTGAAGCCAGTCTCTGGCTCTCTGCACTGAGTCTTTCAGAGCCGCACC 28 22 5 5 1 50 236 274 548 250 298 1 IAD72320\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 44 0 510 38 1

chr4 187519235 187519312 AMPL7155497384 GGAACACGGATTGACGCTTATCT ACCAGGTTTCTGAGTCATTGAGTG GGAACACGGAUTGACGCTTAUCT ACCAGGTTTCUGAGTCATTGAGUG ACAGTGGGTCCCTATGTACAAGGCACTGCATTTGCAGTAATAACCTAAATCGGCAAAAAGGAACAAAAAAGTCCTAT 32 32 3 5 1 32 544 661 1314 612 702 2 IAD59467\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 46 0 0 0 0 0 0 0 1205 117 2

chr4 6293028 6293164 AMPLP3460025323 TGGTCATGTACTGGAAGCTCAAC GGAAGGTCCCAGCCCCTAT TGGTCATGUACTGGAAGCUCAAC GGAAGGUCCCAGCCCCUAT CCAAGAAGAAGAAGCAGGTGGCCGTGGCGGAGCTGCTGGAGAATGTCGGCCAGGTCAACGAGCACGGTGCGAGGATTCACCCTGGGCACCAGCCTTCCCTGGGCGCCAGCCTTCCCACAGGAGCCAGGACCTTCCC 28 34 5 2 1 0 1242.5 346.5 298 879 403.5 2 IAD78091\_236\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 46 0 0 0 0 0 0 0 1589 896 2

chr13 32913092 32913174 AMPLP223951958 TCATACAGCTAGCGGGAAAAAAGTTAAA GTACTTTAGGGTCTTTGCCCATTGA TCATACAGCUAGCGGGAAAAAAGTUAAA GTACTTTAGGGUCTTTGCCCATUGA TTGCAAAGGAATCTTTGGACAAAGTGAAAAACCTTTTTGATGAAAAAGAGCAAGGTACTAGTGAAATCACCAGTTTTAGCCA 40 32 3 5 1 0 0 29 2489 255.5 336.5 2 IAD73325\_236\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 56 0 0 0 0 44 50 0 29 29 0

chr2 179425327 179425443 AMPL7154511868 TATTCATTGCCTTTGAGTAACTTGGTTACT TGCTGAGAAATGCTCTCTTTCCTG TATTCATTGCCTTUGAGTAACTTGGTUACT TGCTGAGAAAUGCTCTCTTTCCUG TACAGGATGTCATCTGTAACTCTCCTTCACATATTGTCCATGCAAGGTGGCTTGTTTCACGTTTTTCTACGATGTAATAGTCGATATCTGCACCACCATCTTCTTGGGGACGTCCC 34 34 6 6 1 52 289.5 209.5 581.5 331 250.5 2 IAD62412\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 60 0 0 0 0 44 48 0 499 80 1

chr17 48246603 48246725 AMPL710372844 ACTTCCGCGTTGACTGGTG CAATACTGAGAGCATCAGGGAAAGAAAT ACTTCCGCGUTGACTGGUG CAAUACTGAGAGCAUCAGGGAAAGAAAT AATGTGACCCTGGTGAGGAGGGACCCTGGGTCCGGGGGTGGGGTGGGGCATGGCCCCCATCCCAGTCCCCCTTCCCTCCCATGCTGCTTCCTATCTCCGTCTCTCTGATTGCTCCAGTCACC 30 36 4 3 1 80 255.5 236 562.5 285 277.5 2 IAD43805\_92\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 38 0 0 0 0 0 0 0 491.5 19.5 1

chr7 131195850 131196175 PODXL\_8.978445 TTGTTGTATCTTCTGCTCCATTCTGG AAACAGCAACCCAGACTACTACG TTGTTGTATCTUCTGCTCCATTCUGG AAACAGCAACCCAGACUACUACG TGCTTGTGGTGTTAGGTTTAGCTGTGGCTGTGGAGGTTGCAACTGTAGTGGTGTCTGCACTTTTTGTGCTCTTGGGGCTCTCGATGGTGGTAGTAGGGTTGCCTGAGCCGCCTCCTCTAGCCACGGTAGTGTTGACTGGGCCTGAGACTTGCTGAGCCAGGGTTGTAGTCCCCGGTGAGTCACTGGATACACCAAGGGTGGTCGCCTTGACCGAGGCCAAGATTTCGTTGGCCTTGGAAGTGGGGACTGTGCTCTGCTGGGCTGTATCTGTAGCCATGATGGTGACACTGGATGCTGGAGTCGGTGCTGTTTTGTTAGATGAGTC 34 48 9 2 1 181 0 0 460 266 194 1 WG\_IAD76560.20150714\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 52 0 0 0 0 44 46 0 0 0 0

chr2 215610400 215610616 AMPL7153261719 CAAAGGTAGTTCTCCAAAAGGATCATCT GTCTGTTTAATGTCTTTGTCTAGTCGTCT CAAAGGTAGTTCUCCAAAAGGATCAUCT GTCTGTTTAATGUCTTTGTCTAGTCGUCT TTTAACATTTTTTCTACCCCACCTCCCAAAATTCAAAATCCTCACCTGTACTGTCAAACTCAGTATATTTTTTAGCCTTAAGAATTACTGCAAGCTCACTGAGCATTTTCTGTTGTTCTGAAGACAGCCCACTGCCTATAAGTACAAGAGGTCCATCCCTACGCTGCCCAGTGTTCATCTGTTAATATAAAAGGAGATACCAGTGTTAAAAACATT 34 38 5 10 1 83 225.5 279 615 274 341 2 IAD49010\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 504.5 53.5 1

chr3 133913862 133914086 AMPL7153511475 CCCACAAGTACACTAACCATGCA TGGCTATGTGCATTTTGTATGTATGGA CCCACAAGUACACTAACCAUGCA TGGCTATGUGCATTTTGTATGTAUGGA GACCACTGGGAAGCAGCATAGACAACTTGAGTAAACTGGCTTTAGAATTAAATTAACTCTTACTGGTGATAGGAGTTGCATTGTTGGGCGTGTCTGCTCTCAGATACTGAGTCGTCTGGGTGGATGGCTGAGACAGCCCTTGGGAACTACTGCTGGCACTAATGCTGCAAACAATTTTTGAGAGAAATATTTGACAAGTCAGTTTCAATGAGAAATTTCCTTTT 28 36 3 8 1 95 225 283 629 320 309 1 IAD63637\_182\_primers\_U.txt 1 1 1 1 0.8333333333 0.5 0 0 0 0 0 0 0 0 0 0 0 0 508 58 1

chr7 150647370 150647586 KCNH2\_7.225029 GTCCCCTGGCGGTGCAT GAGGTTGAGATTTCTCTGACATGGAG GTCCCCUGGCGGUGCAT GAGGTTGAGAUTTCTCTGACAUGGAG TGTGGTCTTGAACTTCATGGCCAGGGCCCGAAGGCAGCCCTTGGTGGCCCCTCGGAAGGGTTTGCAGTGCTGCAGCAGTGAGCGGTTCAGGTGCAGGCAGATGTCAGCCTGCAGGCACTCAGGGAAGCCCTTCAGCACCTGGGGGCAGGGTGGGGGCAGCTCAGCACACCCTCCCTTGGGACCCCCCAACCCACACTCTACTCCACCATCCCACCC 22 30 3 5 1 141 5 4.5 658.5 250.5 408 2 IAD53887\_WG.20140521\_primers\_U.txt 1 1 1 1 0.875 0.5 0 0 0 44 34 0 0 0 0 0 0 0 9.5 0.5 0

chr7 6036884 6037029 AMPL7154840412 AAAAAGACACGAAACTATTAGCCTTAGA TGCAAAGCCTCATTCCTTTTGTTC AAAAAGACACGAAACUATTAGCCTUAGA TGCAAAGCCUCATTCCTTTTGTUC TCACTATCTTTAAAAAAAAAGCTCTCAGGATAAAATGTTCAATTGTAGTTCTCTTGCCAGCAATCTACTTACTAAAAAAGATTATGCAGAGCATCGGAACAGCTCAAACCGTACTCTTCACACACGGAGTCACTAGGGGGCAGCT 40 32 3 4 1 58 258 234 530 283 247 1 IAD86196\_183\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 48 0 492 24 1

chr2 242758063 242758291 AMPL7156877694 ACGTGGCTGCTGTACTCC CACGTTCTCCAGGACCTCAC ACGTGGCUGCTGTACUCC CACGTTCUCCAGGACCUCAC ACCCAGTGGGGCGCAGGGCTCGGCTACACATGGGTATCCGCCTGAGCCAGTCCCCGCTGGACCCGCGCAGCTGGACAGAGCCCTGGGTGATCTACGAGGGCCCCAGCGGCTACTCCGACCTGGCGTCCATCGGGCCGGCTCCTGAGGGGGGCCTGGTTTTTGCCTGCCTGTACGAGAGCGGGGCCAGGACCTCCTATGATGAGATTTCCTTTTGTACATTCTCCCTGC 24 28 5 3 1 150 7 20 33 10 23 1 IAD63637\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 36 0 0 0 0 44 40 0 27 13 0

chr11 17419173 17419400 AMPL7153184702 GTCTCATGTCTCCAGTGACGAA CCCGAAAAGGAGTGAGGTAGAA GTCTCATGUCTCCAGUGACGAA CCCGAAAAGGAGUGAGGUAGAA GTGCTCCGGGAGTGCTGGTGTCTGACCCCTCCTCTGCCCTAGCCCACTGCCGCTCACCATTAGGGCGTAGGTAAGGCCCAGGCCCACCAGGCCAGCAGAGAGCTCCCTGTGCAGGGAGTTGGAGATGGAGGTCACCGCTGCGATGAGCACCACACATGCACCGATGTACTCCTGGGGAGGGAGAGGAGCTGACCTGGGCGCTCAGGGGTTAGAGCCACAGGCCCCTG 24 38 6 2 1 149 277.5 236.5 571 315 256 2 IAD95765\_183\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 514 41 1

chr8 104586636 104586804 SP\_824.5876 AGTTTTGATGCCAAAGAAGATTTGAAGG GCTTCTATTCTTAAGGGAGTAGTTCTCG AGTTTTGAUGCCAAAGAAGATTUGAAGG GCTTCTATTCTUAAGGGAGTAGTTCUCG ACAGACCGATATTGTTCACAGCCTTGTCCTGAACTCCTGCTCTAGTTTATTATGGTTGACTTGCTCTTATTTTTAGAGATTACTTCGTCTGTTTATTTCTTCACTTTATTCCTCTGATATGGAGCTATTCCAAGAATGTCATTCTCTGTCTATAATGTTTGGATTCAC 36 38 3 7 1 62 0 0 0 0 0 2 WG00042.3.20140613\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chrX 29417196 29417319 AMPL7153776208 GTCCCTTTAAAATGCAATTTTAGAAGCTTT ATCTTCTCTGACTTCTCTTATAAGCAGAGT GTCCCTTTAAAAUGCAATTTTAGAAGCTUT ATCTTCTCUGACTTCTCTTAUAAGCAGAGT GTTTTAGTTATTTAAAACTGTTCTATATTTTTCCATTACTATATGTACTACCAAAATTGTATGTTCTTCATATAGGAATGCAGGACAAAAACATGGAGGCCAAGTATTGTATTCAAAAGAGAT 40 30 5 8 1 35 225 280.5 623 289 334 2 IAD48111\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 39 58 14 505.5 55.5 1

chr15 35080486 35080604 AMPL7153473829 ACCCTATAATCAAGCAAAGATGAGAAGAC GGTATCACCTCTGGTTCTTTCCA ACCCTATAAUCAAGCAAAGAUGAGAAGAC GGTATCACCUCTGGTTCTTUCCA TCAGAATTCAACAAGAATCTGGGTGCTTACCTCTTCTGATATAAATATCAGAAGCTGATTCTTAAAGCTTCTACTTTTACATAGAAATAAAAATGTCCTCTCCATTTCTAATCACAGA 28 28 4 6 1 39 241 244 525.5 252.5 273 2 IAD34879\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 58 0 0 0 0 44 44 0 485 3 1

chr4 186066880 186067108 AMPL7161860788 TTTCTGCTGAGAACAGGCACTT GAAGACTGAAAGGAGCCCTGTAA TTTCTGCUGAGAACAGGCACUT GAAGACUGAAAGGAGCCCTGUAA ATAGCCGTTCGGCTTCTGGGCTCTGTCCACAGGGATGCTGCCTGACCCCAAGAACGTGCACATTTTTGTGAGCTGGATGATTGCCCAGAGTGTGACGGCAGTCGCAGGGCTGGTGTCCTACCCCTTTGACACTGTTCGTCGTAGAATGATGATGCAGTCCGGCCGGAAAGGGGGTAAGCTTGTGCTCTACTCATCTAAACTTGTTTGGTTTTGCCCGAGGAGAACATT 38 42 4 3 1 0 854 378 304 854 403 1 IAD94498\_236\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 1232 476 2

chr19 17941344 17941446 AMPL406622142 CTGCAGCTTTTGTCGCAGTAG TCTACACCCTCGCATCTCAAGA CTGCAGCTUTTGTCGCAGUAG TCTACACCCUCGCATCUCAAGA GAAGAGCTCGTACAGGACGACCCCGAAGCTCCAGACGTCTGACTGGCGAGAGAAGATGTTGTCCGAGAGGGATTCGGGGGCATACCTGGAGAGGGGACAAGG 28 28 4 4 1 61 517.5 498 1132.5 601.5 531 2 IAD47675\_93\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 42 0 0 0 0 0 0 0 1015.5 19.5 2

chr7 107356704 107356772 AMPL7157535380 AGTCTATAGAAATGATCATTGCATGGAGG CATTTTAATCACCATGGTTATGTAAGCACA AGTCTATAGAAAUGATCATTGCAUGGAGG CATTTTAATCACCAUGGTTATGUAAGCACA ATGTATAGGTATGATCTGTGTAAAATCTGACATAAAAACAGTGCTATTCTGAGTGAAAATTTTTTTGA 30 36 7 6 1 20 18 0 72 71 1 2 IAD67652\_152\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 54 0 0 0 0 44 60 0 18 18 0

chr17 61868800 61868968 SP\_410.50044 TGTATATTTGCCACTCCTTTCTGCATAA TACTCTGAATCTGCTAGCCTTTTCACTA TGTATATTTGCCACUCCTTTCTGCAUAA TACTCTGAATCTGCUAGCCTTTTCACUA agctgggattacgggcatgtgcaaccatgcctggctaattttgtatttttagtagacacagggtttcaccatgttggctgggctggtctcaaactcttgacatcaagtgatgcacctgtctcggcctcccaaagtgctgggattagaggtgtgagccaccacgcctgg 38 40 7 7 1 87 0 0 0 0 0 2 WG00042.3.20140613\_primers\_U.txt 0.02826595955 7.40905e-06 1 1 0.08556622211 2.26567e-06 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr16 3779407 3779531 AMPL7153054785 CTGAGGTAGGAGAAGGCAGAC ACTGCCAAGAAAACAAATGCCC CUGAGGUAGGAGAAGGCAGAC ACUGCCAAGAAAACAAAUGCCC CTGCTGAGGCACGTTGCGGGTGTTCATGGTGGCCATCCGCCGGCGCATGAGCTGGGCCTGCTGCAGGCGGTGCTGGATCTGCTGCTGGCGGAGCTTGTGTTTGATGTTGAGGCAGAAGGGCACG 44 38 2 2 1 80 656.5 455.5 1273.5 723.5 550 2 IAD51345\_124\_primers\_U.txt 1 1 0.75 0.5 1 1 0 0 0 0 0 0 0 0 0 44 44 0 1112 201 2

chr10 43623528 43623750 AMPL7152999598 CTGCACTTGAAGTTTTGGTTCTTCA CTTTCCATTCTCAGCATGTTTCTTCC CTGCACTTGAAGUTTTGGTTCTUCA CTTTCCATTCUCAGCATGTTTCTUCC TGCAGAACAAATGATCTGTTTTCATTTTTAGGCATGTCAGACCCGAACTGGCCTGGAGAGAGTCCTGTACCACTCACGAGAGCTGATGGCACTAACACTGGGTTTCCAAGATATCCAAATGATAGTGTATATGCTAACTGGATGCTTTCACCCTCAGCGGCAAAATTAATGGACACGTTTGATAGTTAACATTTCTTTGTGAAAGGTAATGGACTCACAAGG 36 34 5 6 1 96 3 1.5 5.5 4 1.5 2 IAD85753\_189\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 4.5 1.5 0

chr8 145006503 145006653 AMPL704460814 CCCCACTGGTCTCTGACCATA CCGCCACTAAGGAGCTAATGT CCCCACTGGUCTCTGACCAUA CCGCCACUAAGGAGCTAAUGT GGGACGGCCAGGGCACAGCTGGGGAGGGGGCTGTGGGGTTCAGGGCAGCTGGGCCACCGCTCACCGAGTAGCTCTCCTTCTTGGCGGTCATGTTGGTGTTGCGGTCGCTCCAGTCGAAGCCCACCTCCTCCTCCTCCTTCTCATTCAGCC 32 28 5 3 1 100 11.5 6 30 17 13 2 IAD43805\_92\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 42 0 17.5 5.5 0

chr2 179510736 179510895 AMPL923498383 GTCTTGGTTTGAGTTTTGGCTTCTC TATGTTGGATACTGGTATTACGTACCTT GTCTTGGTTUGAGTTTTGGCTTCUC TATGTTGGATACUGGTATTACGTACCUT TAACCTTTTCAGGTTCAGGTTCTTGAAAGAGTATTTCAGAGGTGTTAGTATATGTATATGTTAGCATGTGGATATGTAGTATATTTAATAGAAATtatatatatatatatatatatatatatatatatatatatatatGAAGTACAAAGTTTACTTTTT 38 38 6 8 1 33 0 0 1 1 0 2 IAD44951\_93\_primers\_U.txt 1 1 1 1 0.3723399943 7.40905e-06 0 0 0 44 50 0 0 0 0 0 0 0 0 0 0

chr9 101570293 101570398 AMPL7153598098 GCGGCTGCACCAGATTAAC CACTGCTCTGATGGAGAAACTGAG GCGGCUGCACCAGATUAAC CACTGCTCUGATGGAGAAACUGAG TCTACCTCAGCGACCGCATCTCACTGCACCGCCGCCTGCCCGAGCGCTGGAACCCGCTGTGAGTGCACAGCTCTGGGGAGGAAGCCCGCCCTCAGAGCCCCGGGC 28 32 2 5 1 74 313.5 187 557 355.5 201.5 2 IAD52196\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 500.5 126.5 1

chr9 126128400 126128729 CRB2\_3.177466 TGGTCAACGGGTGAGCGA CGGGCACTCGCGTGCAG TGGUCAACGGGUGAGCGA CGGGCACUCGCGUGCAG CGGCGGGGCAGGCGGCAGGGGCGCCGGGTGCCCGAGGGCGGGGAGGCCAGGCGCGGGGCAGAAGGGGCAGGCGCGCGCTCAGCTCCGCCGGTGCGCCCTCCCCAGGTTCCGGTGCGACTGCGCGGGCACCGGCTACGAGGGCACGCACTGCGAGCGGGAGGTGCTGGAGTGCGCATCGGCGCCCTGCGAGCACAACGCGTCCTGCCTCGAGGGCCTCGGGAGCTTCCGCTGCCTCTGTTGGCCAGGTGTGTGCGTGCAGGTGCGCGGCCTGGCGGGGGGAGGGGTAGGTGTGCGCCTGTGCGGCCTGGGGCGGTGGGGCAGGTGTGTGG 24 26 2 2 1 255 0 0 62 22 40 1 WG\_IAD76560.20150714\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 36 0 0 0 0 0 0 0 0 0 0

chrX 154134640 154134754 AMPL7153306085 TCCAAAAGTGGGAATACATTATAGTCAGC AGCCCTTATACCGTGGAGAACTA TCCAAAAGUGGGAATACATTATAGUCAGC AGCCCTTAUACCGTGGAGAACUA AGaaaataaatatataaaattaattttCTTGTAATTCCACTGTCCTTAACTCACCATGATATTATCTTCAACTTCTGCTCTTATATATGGCCCCAGGAGTCCCAAATGTTCATT 40 38 5 4 1 35 228 271 574 272.5 301.5 2 IAD50387\_130\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 44 0 499 43 1

chr5 127636534 127636700 AMPL7154385766 CCAATGCAGTTCTCGCTTTTTACTTC GGACCCGAGTTGAATTCATGTTAATATCAT CCAATGCAGTUCTCGCTTTTTACTUC GGACCCGAGTUGAATTCATGTTAATAUCAT TACCCTGGGGGACAGATGCATCTGAAGGATCCCTCCAAATTCTGACAGGTACCAGGAGAGCAAGAGCCGGGAAGGGCGACACACTCATTAGTGTCTTTAGAGAAAAAGAAGAGAAAAAATAATTTAAGCATGAGATAATTGTTACATAGATTTATCTGTCTGCCAA 36 36 5 6 1 70 328 186.5 579.5 374.5 205 2 IAD71800\_189\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 52 0 0 0 0 0 0 0 514.5 141.5 1

chr2 47641287 47641491 AMPL7154384469 CTTTAGTTTTCTTGGTTTGGATTGGGA CAATTTCATATACTGGCTGAAGTCAAAAGT CTTTAGTTTTCUTGGTTTGGATUGGGA CAATTTCATATACUGGCTGAAGUCAAAAGT GGAACACCAAGGAAAATGAGGGACTTCAGAATTTATTTTCATTTTGCATTTGTTTTTTAAAATCTTTAGAACTGGATCCAGTGGTATAGAAATCTTCGATTTTTAAATTCTTAATTTTAGGTTGCAGTTTCATCACTGTCTGCGGTAATCAAGTTTTTAGAACTCTTATCAGATGATTCCAACTTTGGACAGTTTGAACTGACT 28 32 5 6 1 66 211 302 643 282 361 1 IAD61612\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 60 0 513 91 1

chr1 152276816 152276991 AMPL7155447331 GCCGGACTGTGAGTGTCTAG CTACGAGCAATCGGTAGATAGGTC GCCGGACUGTGAGTGTCUAG CTACGAGCAAUCGGTAGATAGGUC GCTGTCCGCCTGAGTGGAAGCTTCATGGTGATGCGACCATGAGTGCCTGGAGCCATCTCCTGATTGTTCGTCATTACGAGTTTGTCTGCTGGCACTTCTGGATCCTGACTGCCCACGGGAGGCATCAGACCTTCCCTGGGATGTGGTGTGGCTGTGATGGGACCCTGAGTGTCCA 28 34 5 5 1 100 2 2 1062.5 386 676.5 2 IAD94568\_182\_primers\_U.txt 0.39583325 0.25 0.1666668 0.125 0.37458335 0.1 0 0 0 1 40 40 44 44 0 31 48 44 4 0 0

chr6 51640624 51640812 AMPL7153070501 CTCTTACCAATTGTTCCTGGGTCAA GACTCCTCCATATAGTCTACTTCACAGTAT CTCTTACCAATUGTTCCTGGGUCAA GACTCCTCCATAUAGTCTACTTCACAGUAT ATGAATTCCATTCATACGGTCACAAAAGACTCCCTCTGAGGCTCTAAGGAGAATCAGAAGCTTTTGTTCCTTTTCTAAGGGATTTTCTAAAGTACCTGTTTACAAAGAAAAGTATATCATTCAAATCAATTTGAAATTAAAAGAAAGAGAGGGAGAAATTGCAGTATAATTTCAATAATGCAATGTAG 30 40 6 8 1 61 257 248 563 295 268 1 IAD50452\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 50 0 0 0 0 0 0 0 505 9 1

chr5 80131129 80131341 AMPL7156621135 GACCTTTGATAAAAGATGACTGAGAGACT AATGCCTTTCCTATATTGGTAAAGCCA GACCTTTGAUAAAAGATGACUGAGAGACT AATGCCTTUCCTATATTGGUAAAGCCA TCTGGGGTTTGATGCAAAGATCATCAGAGGCATCTACAAATGAGTAGTCACCAGTGACAAAATCTCAAAGCGAGGCAGGCTGGAGAATGGGCGATCTGTTAGTCTTGCCAGAGAGGAAGGTATTAGCAAAGGCAGATTGAATAAGCGGAAGGTAAAAAAATAAAAAGCAGCAATAGCATTTTTTTTTTACATATACTTCATTAGCACAGGTT 26 28 4 6 1 86 0 0 0 0 0 1 IAD46040\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr17 78914329 78914554 AMPL7155132035 CACGACCTGGAGAGTCAGATC ACCAGCCTTGATGTGCTTATCTG CACGACCUGGAGAGTCAGAUC ACCAGCCTUGATGTGCTTATCUG GCAAGGAGCGGGAGTGGCGGTTCCTGCGAAACAGCCGTGTCAGGAGGCAGGCCCAGCAAGTCATTCAGAAGGGTAAGGGCACCCGCACAGCCAGCCAGGGGCTCATTCCGGGGGTGGGGCCTGGGGCGAGGGTCCCCTGTGAGCAGGCCCCCCGCGGCCCACGCACAACCTTCTCCAGCCATCCACTGTCCCACGACAGACCCGCCCCGCACCCCACCTCCCTTG 34 34 3 6 1 157 253 240 638.5 333 305.5 2 IAD57799\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 42 0 0 0 0 0 0 0 493 13 1

chr9 37422768 37422967 AMPL7153076713 GAGACCGGTGCGACTCAT GCGTCGTCTTAAGAGGAGAACTG GAGACCGGUGCGACUCAT GCGTCGTCTUAAGAGGAGAACUG AAGGTGTTCGTCACCCGCAGGATACCCGCCGAGGGTAGGGTCGCGCTCGCCCGGGCGGCAGAGTAAGAGCCTCGCGCGCCGTGGAGGAGGGAGCAGGGCGGTCCCAGGGACCGGAGAGCCGGGCGGGGCGTTTGGGCCTTGTGGCCGGCTGGGGCAGGCTTGGAGTTTTGGGGAGTCTCGGAGAAAGTTCTCTGGGGCC 28 32 2 4 1 141 2.5 15.5 505 232 273 2 IAD56340\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 36 0 0 0 0 0 0 0 18 13 0

chr13 23649885 23650056 SP\_199.13675 CAGTTGTCTGCTGCTACTAATACTACTG ATCACAGGTCAACATCTGTTTCACA CAGTTGTCTGCUGCTACTAATACTACUG ATCACAGGUCAACATCTGTTUCACA CTTAAGTCTATTCAACTAAGTAATTGCCCAGCAACTTAATATTTAAGATGATTGTGAAAACATAAAGGAACATCTCTGGGCAAGGGCTGATTGAGACATTACATTCTTATTCTTCTTTTAAAAATGTATTGATATAATTTTAAAGGATTTCTGAAATTCGAGAAATATGGC 38 30 9 5 1 51 0 0 0 0 0 2 WG00042.3.20140613\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr1 12007923 12008239 AMPL7155074964 GCCCTGTTCTGTAATGGGTTGA TTTCATCCTTCAGGCTTCCAGAAG GCCCTGTTCUGTAATGGGTUGA TTTCATCCUTCAGGCTUCCAGAAG ATGAAGACACTTCCTGCCAGAATTTGACAGGTCACTGGGAACAAAGACCTCCTCCCTGTCACCTCCCTCATCCTCCATTCCCATTCACCATACCCTCCTCTGTCTGCAGACAACCTTTTAGTCCTCACGGTGGCCACTAAGGAGACCGAGGGATTCCGTCGCTTCAAGCGCTCAGCTCAGTTCTTCAACTACAAGATCCAGGTAAGGGGTTTCCTGGGTGAGGCAGAGACAGTGAGGGGTGGCAGGAGGATCTAGGAGCTAGTGTCCTTTCCAAACTACCACGTCTCTTAAGATAGACTTGGGGCCACAGGGGAGG 30 22 6 4 1 170 0 0 153 81 72 1 IAD72098\_236\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr1 160394870 160395033 AMPL7153555400 GGATGAAGGACCGTGGGTAGAT GAAGTCCTGGCGTTTTAAGAGGAA GGATGAAGGACCGUGGGUAGAT GAAGTCCUGGCGTTTUAAGAGGAA ACAGAGATTCTTATGCAGCCCCTTCTTTCCACTTCAGGCCTTCTTGGAGCGATACTTGGCGGCTGGACCTACCATCCAGTACCACAAGGAACGCTGGCTGGCCAAACAGTGGACATTGGTGAGCGAGGAGCCGGTGACCAACGGCCTCAAGGATGGCATCGTT 42 22 3 3 1 92 505 558.5 1197.5 559 638.5 2 IAD51345\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 1063.5 53.5 2

chr9 75303588 75303728 AMPLP637153992 AACCACTTACTAACAATTGTACAGGCA GCTCAAGTCCACAAGAGGATAAATTCT AACCACTUACTAACAATTGUACAGGCA GCTCAAGUCCACAAGAGGATAAATUCT TTAAATAATTGCTGTACTGTTTTCTTTCCTCAACAGTACAAATCAAAGTGGAGGAAAAAGAAGACGAGACTGAGGAAAGCTCAAGTAAGTGGTGATGGGCCACTTGGGATACATTTCCTATGGAATACCAGTAAACTCAA 28 44 4 4 1 0 794.5 317.5 400.5 794.5 358.5 2 IAD78091\_236\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 1112 477 2

chr22 33780141 33780330 AMPL7153030529 TTTGAGAAACAGCACCAAGCACA GTGTGCCTAGCTCTCCATCTTTTT TTTGAGAAACAGCACCAAGCACA GTGTGCCTAGCUCTCCATCTTTUT TCAGGAATAGCTGCACCTTCGAACCTGGCCACTCACCTGGTCAGCTAAGGATGTAGAGAGCATGCCCATGAGCTCCCTCTCTGCGGTCAGCCTCCACATCTGCTCCCATTTCATCTTCCGCAGCTTATCCAGAAGTAACAGGATCACCCCTGGGCAACAGCACAGGATAAAAGAGAAAATTAAAAAATA -1 36 1 7 0 95 248.5 252 554.5 286 268.5 2 IAD51407\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 500.5 3.5 1

chr9 140056309 140056641 GRIN1\_12.16783 CTCTAGGGCGGCTTCAGT GCTGCATGAACGAGTCCAG CTCUAGGGCGGCTUCAGT GCTGCAUGAACGAGUCCAG GGGGGTACCTGTGGCGGGAGCTGGGAGGACGCTGCCTGCATGCCCGCCGGCTCTGTCGCCTCGCAGGTGAACAACAGCAACAAGAAGGAGTGGAATGGGATGATGGGCGAGCTGCTCAGCGGGCAGGCAGACATGATCGTGGCGCCGCTAACCATAAACAACGAGCGCGCGCAGTACATCGAGTTTTCCAAGCCCTTCAAGTACCAGGGCCTGACTATTCTGGTCAAGAAGGTGGGCAGGGGCCGGGTGGCGGGGTGGCGGCGGGGGGAGTCCCTGGAGGGCCCGGGCCGCGCTGACCTCGCGTCCCTCCGCAGGAGATTCCCCGGAGCACG 32 22 3 3 1 221 0 0 90 83 7 1 WG\_IAD87644\_206.20160120\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 38 0 0 0 0

chr15 72642820 72643031 AMPL7153252566 CCTGAAGCTTCACTCTGAGCAT CATTTTGAGTATCTTCTACTCTGCTAGCTT CCTGAAGCUTCACTCUGAGCAT CATTTTGAGTATCTUCTACTCTGCTAGCUT ACAAGCAGAGTCCCTCTGGTCCCAGACATCATTCTTACCTGGTCCCCAGGACAAAGTGTGGCCAGGAGTGTCAAACTCTGCAAGCACACGGATACCCCGGAGCCGTGCGTATTCAATGACCTCCTTCACATCCTGTGCTGTGTAGATGTGGGTGACAGGGTTGTAGGACCCCTGAAAGGCACAAGACACCCTTCAGGTTCACACTTCCTGA 26 40 4 9 1 114 249.5 245 777.5 380 397.5 2 IAD59911\_183\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 494.5 4.5 1

chr13 49054096 49054220 262117124 CCACTTGCCAACTTACCCAGTA GGTGTACACAGTGTCCACCAA CCACTTGCCAACUTACCCAGUA GGTGUACACAGTGUCCACCAA CATCAATGCTGTTAACAGTTCTTCATCCTTTTTCCAGCTTCTACTCGAACACGAATGCAAAAGCAGAAAATGAATGATAGCATGGATACCTCAAACAAGGAAGAGAAATGAGGATCTCAGGACC 38 24 3 4 1 51 17 15 37 18 19 1 WG\_IAD59162.20140822\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 32 2 0

chr12 57424822 57424967 AMPLP862903394 GTGCCTGGGCTCCACTT CTCCCAATCCCCCTGGTC GTGCCUGGGCTCCACUT CTCCCAAUCCCCCTGGUC CCTTCCACTGGTAGAAGAGCTGCTGCAGCTCCTGATTTGCTGTGCTGAGGCACTTGTAGGGGGCGGCTGGCCATGTCTTGTCTAAGACGTTTGTGGATGGCAAATTGTTCTTCAGCCCCAGTAGGAATTTCTGTACCTAGTTTGG 32 30 4 4 1 0 741.5 360.5 340.5 741.5 387 2 IAD78091\_236\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 1102 381 2

chr1 228557893 228558016 AMPL7153558170 CTGAGCCTTCCTCTCCCTGTA GCCACAGTTCTGTGCTCACAT CTGAGCCTUCCTCTCCCTGUA GCCACAGUTCTGTGCUCACAT GGCCCGGCCTAGTGCGGCCCAGTGCCTCTCCCACCCCTGGTTCCTGGTGAGTATCAGGGTCAGCCCCACACTATGCAGGGGGAGCCTGAGGCCAACAGGGGCAGGGCCTCTGGGCAACAGGGC 34 24 6 4 1 86 209 304 528 216 312 1 IAD91552\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 42 0 0 0 0 0 0 0 513 95 1

chr6 153071882 153072103 AMPL7161295195 GTCTTTCAGAGCACTTTGTGATTGC AGGGAAAAAGAAGAGGAAAGGTAAAGTT GTCTTTCAGAGCACUTTGTGATUGC AGGGAAAAAGAAGAGGAAAGGUAAAGUT CAGTCCTAAGTATAAGCCCTATAAAATGATGGGCTTTGAAATGCTGGTCAGGGTAGAGTGAGAAGCACCAGCAGGCAGTAACAGCCAACCCTTAGCCATTGCTAAGGGCAGAGAACTGGTGGAGCCTTTCTCTTACTCCCAGGACTTCAGCACCTAAGACAGCTCCAAAACAAACCAGAACAGTCAGCTCCGGGGGAGCACGACTGGGCGAGGTAAGTGAA 42 60 5 2 0 113 256 243.5 546.5 275 271.5 2 IAD89694\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 499.5 12.5 1

chr16 722219 722331 RHOT2\_15.34504 GGGCCTGGGCCCAGTATC GCAGACTTGCCCACTCCAC GGGCCUGGGCCCAGTAUC GCAGACTUGCCCACUCCAC TGGCAGCTGCCCTAACCCGTGTCTATCCTCACAGTCACTCGTGAGAAGAGGCTGGACCAGGAGAAGGGACAGACGCAGCGGAGCGTCCTCCTGTGCAAGGTGGTAGGGGCCC 34 22 3 2 1 71 2.5 1.5 5.5 3.5 2 2 WG\_IAD58104.20140520\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 36 0 0 0 0 44 38 0 4 1 0

chrX 31526228 31526447 AMPL7158708379 ATTTTTAGGCTTGACAGGTGGAAAGTA CATTCTGTCAACAGAATGTAAGCAAAGT ATTTTTAGGCTUGACAGGTGGAAAGUA CATTCTGUCAACAGAATGUAAGCAAAGT ATAGGACCTTGGTAAGAGTTATGATAAGAGGTTATGCATTCAACTTCACTTGTATACACACAGATCAAGAAAATTATTATAGTAGAAGAATCTGACCTTTACATGGTATGTCTTCCTGTGTAACATTTTCAGCTTGAACCGGGCACTACAGCACTGATCCTGTTGCATAGCAATCCTGAGAAAACCCAGAAACTGAAAGAGCCCTGCTTTAAAATGCCA 40 28 4 5 1 86 3 5.5 18 9 9 2 IAD80550\_238\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 8.5 2.5 0

chr2 21231678 21231881 AMPL7154973833 CCTTCAGATCCCTGAGATATATATCTGGAA CCTTCCAGACACCTGATTTTATAGTCC CCTTCAGATCCCUGAGATATATATCUGGAA CCTTCCAGACACCUGATTTTATAGUCC GGGCCACTGCAGCTCACTGTTCAGCATCTGGTCAATGGTTCTGATGATCTTTACTTTCATTTCTACAAAGTCAATTGTAAAGGAAGGAATGTGGAAGGTGTTAAGGATGGTAAATTCTGGTGTGGAAAACCTGGATGGGATTTTTATATTTTTTAAGTCTTTGAAGTTTATCTGAACTGATGGAATCCTCAAATCTGTTAGGG 38 42 8 5 1 79 0 0 0.5 0.5 0 2 IAD84176\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 60 0 0 0 0 44 54 0 0 0 0

chr6 10404781 10404939 AMPL7154903775 GCGACGCGTTGAGACACT CTGTCCAAGTCCAACAGCAATG GCGACGCGTTGAGACACT CTGTCCAAGUCCAACAGCAAUG GGGTGGTGAGAGCCGCCGCTGCACTTCCGCCACCGTGACCTTGTACTTCGAGGTGGAGCTGAGGAGCGAGAGGCGACCCGGAACTGAACAGAAGACTTCGTTGGGGTTCACCACGCCGCCGAAGAGGTTGTCCTTGTTAATAGGGATGGCGGAGACGG -1 30 1 4 0 98 214 278 523 234 289 1 IAD58594\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 36 0 0 0 0 44 44 0 492 64 1

chr16 3043324 3043455 AMPL7156165430 CCAATCTCTAGCCTCCCAACTT CAAGACCAGCTTGGGAATGTTG CCAATCTCUAGCCTCCCAACUT CAAGACCAGCUTGGGAATGTUG GTCTCACACAACAAACCTCATTCGACAAACCAATCCAggcctggagcagtggctaacacctgtaatcccaacagttcgggaggcagagttaggtggatcaattgagcccaggagttcaagaccagcctggg 36 32 5 3 1 70 0 0 0 0 0 1 IAD60530\_188\_primers\_U.txt 1 1 0.2472384493 0.000668896 0.3223680134 7.9233e-05 0 0 0 44 44 0 0 0 0 0 0 0 0 0 0

chr10 37597094 37597265 SP\_89.10413 ATGGAAGACTAAGCACCTGCATTTAT ATCTGTATCATCTTCACAAGCAAGGAG ATGGAAGACUAAGCACCTGCATTUAT AUCTGTATCATCTUCACAAGCAAGGAG GGCCTTTGCCTACTCAAAACAATCTGTCCTCCCCACCCTGTCATCTCTGTTCAGAGTAAATACCTCCCTCCCTCTGCTTTTGCCCTAAGTTATTTTTTCAACTCACCTAACATCTAACTTGGCTTTGCAGCTCTGTTTCTCCAAAACCCTCTCTGCCTGTTTCCTCCCAAG 38 40 4 6 1 80 0 0 0 0 0 2 WG00042.3.20140613\_primers\_U.txt 1 1 1 1 0.7777777778 0.5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr10 14987033 14987228 AMPL5690232095 ACTGAAGTATGTTACAAACTGAGGCAAA GATTTCTTAGTCACCAAGATGGCTCAT ACTGAAGTAUGTTACAAACUGAGGCAAA GATTTCTTAGUCACCAAGATGGCUCAT TTTTGTCAATCTACCTCTAAAAATACTTCCCACttaaaaaaaattaagttattaaaaaaataaaaCTTACAATTCGTTTCTTCCAAAATCTGTATTTCGGGCTCGTTAACAACAACTCCTTAGTCACAGGTGAACAGTATAGATAAACCTTCAAGCTGAAAGGAAAAAAGAAAAAAACTTTCAGTACAATCCAAA 24 38 5 5 1 57 216.5 276.5 532.5 242 290.5 2 IAD47675\_93\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 493 60 1

chr20 31024957 31025108 AMPL7154373778 GCTGAGCCACAAAGCAAACTTTG ACAAGGCACAATACACAGAGCTT GCUGAGCCACAAAGCAAACTTUG ACAAGGCACAAUACACAGAGCUT TGCGAGCCACAGTGCATCACTTTCCTTGCAAATGTTCACTGACAGCAGCACGGTGGAAAGCATCTCGCTCCAGTGTGCGTGCAGCCTGAAAGCCATGATCATGTGCCAAGGCTGCGGTGCGTTCTGTCACGATGACTGTATTGGACCCTCA 52 32 2 2 0 83 545.5 634 1248.5 586.5 662 2 IAD57032\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 46 0 0 0 0 44 46 0 1179.5 88.5 2

chr4 150412995 150413123 SP\_627.24204 GCCTGGCTAATTTGTTTTACATGTTTGT AAAAAGAAAAAGCCTGCGATACCTAGTA GCCTGGCTAAUTTGTTTTACATGTTUGT AAAAAGAAAAAGCCUGCGATACCTAGUA agtggccatactaatttatatctctaccatttttttcaagggttccctttcttctacatcatctccagcatttgttatctttcattttttttcatagatgccatcttaataggtgtaagctgatatca 34 36 6 4 1 42 0 0 0 0 0 2 WG00042.3.20140613\_primers\_U.txt 0.7666666 0.333333 1 1 0.8333333333 0.5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr17 46804198 46804426 AMPL7154520496 CTTGGCGAGAACCTTCTTCTCT GGTATCTGACCATGCCTTTTCCTC CTTGGCGAGAACCUTCTTCUCT GGTATCTGACCAUGCCTTTTCCUC TGACCCGGCGGTTCTGAAACCAGATGGTAATCTGGCGCTCCGAGAGGCTGGTGGCTGCCGAGATCTTGCGCCTCTTGTCCTTGGTGATGAACTTGTTAGCCGCATACTCCCGCTCCAGCTCCCGCAACTGCCCCTTGCTGTACGGAATGCGTTTCTTGCGGCCGCGACGAAAGGCGCAGGCGTCAGGAGGGTGCTGCCCGCTGGAGTCTGCGCGGCGTGAAAGGGAGG 42 36 4 6 1 143 2 0.5 788.5 386 402.5 2 IAD59586\_182\_primers\_U.txt 0.875 0.5 1 1 1 1 0 0 0 44 44 0 0 0 0 0 0 0 2.5 1.5 0

chr11 233101 233227 AMPL7153689418 TAGTTTCCAGGGTACAGCTCCTT CAAAGGCCTCAGAGCCTTTCTT TAGTTTCCAGGGUACAGCTCCUT CAAAGGCCUCAGAGCCTTTCUT GCCAAAGTGAAAAAGGGCTTGGGGTTGTGAAAGAAGAATGGGAGTTCAAAAATGGCCTCGGGGTACGGGAGATCGTACTGCTGGAGGTTGCTGTACAGGCCACTCCCCGGCGATCTGCAGGGAGAG 36 34 4 3 1 71 538.5 493 1129 576.5 552.5 2 IAD53081\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 46 0 0 0 0 0 0 0 1031.5 45.5 2

chr11 17464789 17465008 AMPL7154782952 GTACTGGACAGGAGCCAGTAGA CTTTTGAAATTGCTTTGTTTCTCCTCCTT GTACUGGACAGGAGCCAGUAGA CTTTTGAAATTGCTUTGTTTCTCCTCCUT TGATGACAGCTGCTCCAATTAAGGCACTGACTCCGAGTATGTAGTAGAGGAGAATCACACCCACAATGATCTGAGGAAGGGGTCATGGGTCAGGTCCCTTTGACCTGATGGTTGCCCTGCCAGGAGGTGCTGGCAAAATCCCTGTTTCCCCAGTCCCCTAGAGTGGGACAAGCCTTGGTGCCCAGGTTTCCAAATTATCTTGGGGAGTGGAGTGCAGGG 44 36 3 7 1 118 259 254 552 283 269 1 IAD90672\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 44 0 0 0 0 0 0 0 513 5 1

chr16 15833928 15834050 AMPL7153084997 CCCTACTCACTTTTGATAGTTTATTGTTCT GCTGTTACTCTTTTCCCTCCACAA CCCTACTCACTUTTGATAGTTTATTGTUCT GCTGTTACUCTTTTCCCUCCACAA ATCATCCATGACCAGGATCTCATCCTCCAGTTTCTTGATCTTGGCCTCAGCCGTGACCTTCTCAAGTTGCAGCTTCTGCCTGGCAGCTTCCTCCTCCTCCAGCTGTTCTTCAAGGTCCTTTG 36 24 7 5 1 65 514 516 1078 544 534 1 IAD59467\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 1030 2 2

chr5 112177013 112177235 AMPL7154394007 AACCTCCAACCAACAATCAGCT GCTCAGTCTCTTTGATAGGTTCATTTTCTT AACCUCCAACCAACAAUCAGCT GCTCAGTCTCTTUGATAGGTTCATTTTCUT ATAAGACACAAGCTATTGCAAAGCAGCCAATAAATCGAGGTCAGCCTAAACCCATACTTCAGAAACAATCCACTTTTCCCCAGTCATCCAAAGACATACCAGACAGAGGGGCAGCAACTGATGAAAAGTTACAGAATTTTGCTATTGAAAATACTCCGGTTTGCTTTTCTCATAATTCCTCTCTGAGTTCTCTCAGTGACATTGACCAAGAAAACAACAATA 32 40 2 8 1 88 543.5 458 1087 592 495 2 IAD76297\_185\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 44 0 0 0 0 44 60 0 1001.5 85.5 2

chr1 16464473 16464684 AMPL7154994799 CAGGTCGCTCACTGTCACA GCACTGACTCCTCCTGTCTGT CAGGTCGCUCACTGUCACA GCACTGACUCCTCCTGTCUGT TGGTGCGGGTCAGTCCGTGAGGAGGCTCCGAGTAGCGCACACTGGCCTCACACGGCCCGCATTCCCCAGACTCGGGCCAGCACTGTTCGCAGGTGACGCTGTAGACAATGTCCTCGCGGCCCCCGCTGTCCTGAGGGGGCGTCCAGCGCAGCTCCACCTTGGCACCCATGCCCACGGCTGTGAGGTAGTGTGGGGCGGAGGGGGGTCCTGC 28 30 4 6 1 146 18 13 37 23 14 1 IAD63331\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 38 0 0 0 0 0 0 0 31 5 0

chr1 207743129 207743354 AMPL7153621168 GGAAGCTACATGCAGGTTGAGA AATAGCCTAGTTTCCTTGCTGAGATG GGAAGCUACATGCAGGTUGAGA AATAGCCTAGTTUCCTTGCTGAGAUG CTTACGTACTGAAGAGAGTTCAGATTACTCTACCTGGCTCCAAAACATTTTCTTTCCCACAGGTAAATCATGTAAAACTCCTCCAGATCCAGTGAATGGCATGGTGCATGTGATCACAGACATCCAGGTTGGATCCAGAATCAACTATTCTTGTACTACAGGGTGAGTTGGCAGCAACATCTCTTGGTTTAAGAGTTCCAGCACAGCGATAGTACTTTCTAGCCA 30 34 3 6 1 99 0 0 0 0 0 2 IAD83172\_182\_primers\_U.txt 0.25 0.25 0.2916665 0.25 0.2481481111 0.166667 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr8 27904950 27905175 AMPL7160707576 ATTGTTTGTGTGGCACAAAAAGTTC GTCCTGTGCATGATTGCCTTTG ATTGTTTGTGUGGCACAAAAAGTUC GTCCTGTGCAUGATTGCCTTUG AGAGCAGGAAATTCGAAGTGCCAAGCTTGATCTTGAGAATTTTAGTGATGGAGATTTAAAAAACATAAATTACCCGTTTCCTCCTCGGTGAGGAGAGCCTGCTGCCAGTACTCCTGGGCGCTGACTGTATACACCAGATCTGAGGCTTCCAGAACCTTGAAGTCAGCTGGCAGTTTTCTCTGAAGTGAGAGAGTCACACAGAAAACAGAATAACTCAAACCATAG 34 32 5 6 1 101 255 236 580 287 293 1 IAD85518\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 491 19 1

chr11 121039310 121039488 AMPLP806297584 GCTTTGCTTTCCCTCTGCATTC CACATCTCGAGTCGTCAACAC GCTTTGCTTUCCCTCTGCATUC CACATCUCGAGTCGUCAACAC CAGCCTGAAAAATGGTAGGTAATTGAATAGGTAACATTGTTTTGGATTCCTGTCTCATAATTGTTTCCGTTTTAGTGTAATTAACCTGACAGTTCCAACCCAAGAAGGCAGCTTCATCACCAAGATGGCTCTCTACAAAAACGCCTCCTACAAACATCCTTACCGCCAGGGTGAAGTA 32 24 5 4 1 0 1027 307.5 326 695 323 2 IAD78091\_236\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 40 0 1334.5 719.5 2

chr7 2583580 2583666 AMPL7160113589 AGTCTCCCTGCAGGGAGAA CCCTCTGCTATTTGTATCTTCCCTGA AGUCTCCCUGCAGGGAGAA CCCTCTGCTAUTTGTATCTTCCCUGA ATGGTGTCGACCGCACCTGGGTAGGGGATGGGGGAAGAGAGGGAAAAGGGGGTGAGCCAGAATAGAGCTGGGGGAGGCAGAGGGCC 32 34 3 8 1 56 4 5 9 4 5 1 IAD82871\_185\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 38 0 0 0 0 0 0 0 9 1 0

chr17 41276040 41276116 AMPLP223413081 ACTCTTGTGCTGACTTACCAGATG TTCTAATGTGTTAAAGTTCATTGGAACAGAAA ACTCTTGTGCUGACTTACCAGAUG TTCTAATGTGUTAAAGTTCATUGGAACAGAAA GACACTCTAAGATTTTCTGCATAGCATTAATGACATTTTGTACTTCTTCAACGCGAAGAGCAGATAAATCCATTTC 32 28 6 7 1 0 0 28 1744 248.5 464.5 2 IAD73325\_236\_primers\_U.txt 0.75 0.5 0.75 0.5 0.7 0.5 0 0 0 44 48 0 0 0 0 44 64 0 28 28 0

chr12 50017381 50017598 AMPL7153693125 GGAGGCTCTGGCATGGTAA CGCCACTCTCGCACCTTT GGAGGCTCUGGCATGGUAA CGCCACTCUCGCACCTUT ATCCCCGCGCGGGGGTGGAGGGGCTCGGGGCGGTCCCACAGCGCCCCCTGCGGCCCGGGCCGTGGCCGATGGGGCGGGGAGGCCGCTGGGGATAGCTGGGACCCCggggagggcgagggaggccaagggtgagggaagagagcccgggaggggggatgggggcggggactgggggcgaaggggcgggggaggCCATGATGGAGCCTGGCCGGGGGCG 28 28 4 3 1 174 0 0 2.5 1.5 1 2 IAD59467\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr19 11200131 11200310 AMPL7153577400 TCACATTGAAATGCTGTAAATGACGTG GCTCCCTCTCAACCTATTCTGG TCACATTGAAAUGCTGTAAATGACGUG GCTCCCTCUCAACCTATTCUGG GCCCCGAGTGCAATCGCGGGAAGCCAGGGTTTCCAGCTAGGACACAGCAGGTCGTGATCCGGGTCGGGACACTGCCTGGCAGAGGCTGCGAGCATGGGGCCCTGGGGCTGGAAATTGCGCTGGACCGTCGCCTTGCTCCTCGCCGCGGCGGGGACTGCAGGTAAGGCTTGCTCCAGGCG 38 28 6 6 1 123 732 702 1524 766.5 757.5 2 IAD84176\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 54 0 0 0 0 0 0 0 1434 30 2

chr11 67257888 67258000 AMPL7153569744 GGTGGTCGAGGAGTACTACGA GGTTGTGAAAGGCTAGGTCTTGAC GGTGGUCGAGGAGTACUACGA GGTTGTGAAAGGCUAGGTCTUGAC GTGCTGGACCACTGCTCTTCCATCCTCAACAAGTACGACGGTGAGCACCGGGCCCTGGGCTGCCGGGGGCTGCGAGTGGTCAGAGAGTGGCCTTTCTCCTGTCACTGCTGGG 32 40 4 5 1 73 777 872 1872.5 891 981.5 2 IAD71397\_183\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 42 0 0 0 0 0 0 0 1649 95 2

chr2 179436792 179437020 AMPL7153031875 ATGCCCTTTTCATTCTGAGCTGA GAAACCGCAGAATCTGTGAAAGC ATGCCCTTTUCATTCTGAGCUGA GAAACCGCAGAAUCTGUGAAAGC ACACGGAAAGAGTATTCTTCACCCTGAATTAATCCAGTGATAGTGGCTTCAGTGACCTTGACTGTGGCACACGTGGCCCATTTGTCACTGCCTTTGGTCTGCATCTCCACAATGTAGCCTAGAATTCGGCTGCCTCCATCATGCTCTGGTTTCTCCCAAGAGAGTGACACACTATTTCTTGTGACATCCATCAAAGTTATTTTTCCTGGAGGAAGAGGTCGTTCTGAT 30 36 5 3 1 106 2 3.5 8 2.5 5.5 2 IAD51407\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 46 0 0 0 0 44 44 0 5.5 1.5 0

chr7 2966293 2966506 AMPL5285043073 TCTGAGTCCATTCCACATAGTAGGT GAAGCCTGGAACCTTCCAGAA TCTGAGTCCAUTCCACATAGUAGGT GAAGCCUGGAACCTUCCAGAA TAAGGACCTGTGACCCTCCACCTGTGACCCTCTGTGACCCGTCCTACCCAGGACCCTCCCGGATCTGAGAGGCACGTACCATCCAGATCTAAGGCGTCAAACCCGCCGCTGTCATTGTCTTCTTCGACTGTGCTGCAAGACACAAGGGAGGTGGGGGAAAGCATGCATGTGAGTGTGTGTGTGTGTGCACACGCAGGCAAGGGAGAGAGAAGC 30 22 5 2 1 123 0 0 0 0 0 2 IAD46144\_93\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr5 176665316 176665529 AMPL7153195179 CTCAGAACAAGCAGGTGGACGAGAAT GCTTCCTCTAATCATATCTGCTCAAATACT CUCAGAACAAGCAGGUGGACGAGAAT GCTTCCTCTAAUCATATCTGCTCAAAUACT CTTTGATTTCAACCAAAGAAGAGCCTCCAGTTCTTGAAAGGGAGGCTCCGTTTTTGGAGGGCCCCTTGGCTCAGTCAGAACTTGGAGGTGGACATGCTGAGTTGCCGCAGCTGACCTTGTCTGTGCCTGTGGCTCCGGAAGTCTCTCCACGGCCTGCCCTTGAGTCTGAGGAATTGCTAGTTAAAACGCCAGGTAAGGTGGGGTTGGGGTCTC 40 38 2 9 1 117 223 276 550 248 302 1 IAD62451\_192\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 52 0 0 0 0 44 60 0 499 53 1

chr17 29559051 29559267 AMPL7153006304 GGGAAGTGAAAGAACTTGAAAGATTCA CCTGTCATGGGTATTATTTCTTTGCTTTTT GGGAAGUGAAAGAACTTGAAAGATUCA CCTGTCATGGGUATTATTTCTTTGCTTTUT GGTCTCTAAAttttttttttttttttttttttttttCAGAGATTTGGACCAGGCAAGCATGGAAGCAGTAGTTTCACTTCTAGCTGGTCTCCCTCTGCAGCCTGAAGAAGGAGATGGTGTGGAATTGATGGAAGCCAAATCACAGTTATTTCTTAAGTAAATTTCAGTCACCAAAAAACATAAAGCAAAAAGCAAATAAAGCCCCCCACCACACAA 44 38 3 8 1 81 2 0 464 108.5 355.5 2 IAD72006\_183\_primers\_U.txt 0.4095238 0.047619 1 1 0.3362987043 0.00218818 0 0 0 0 0 0 0 0 0 0 0 0 2 2 0

chrX 129189808 129189908 AMPL7153039582 CTTCCTCCAGCCTCCTTCAATAA GGCATGGTGGTGATTTCAAAGT CTTCCTCCAGCCUCCTTCAAUAA GGCATGGUGGTGATTUCAAAGT TCCCATCCTTGCCTTTGCAGGCCCTGCAACTGGTTCCTCTTTTCCGATGTCTTGAAGAGGCTGAAGCTTTCCTCGAGGATCTTTCAGGCCCGGTTCCCGC 40 24 5 4 1 57 541 515.5 1143.5 567.5 576 2 IAD49510\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 44 0 1056.5 25.5 2

chr9 745674 745863 AMPL7157144033 TCCAGCATAGTTTTGGATTTTTCTTTTGTC ATGTTACGTGTAGTTCTTCATGGCTT TCCAGCATAGTTTUGGATTTTTCTTTTGUC ATGTTACGTGTAGUTCTTCATGGCUT TATTTTAAAATAAGGAAGTCGAGATGACTTTGATCATTGGTAACTTGGGCCTGGGCCAGACAAAGTATAAAACTTACAAAAGAATATTCTCATTTGGTCTTAACTAGGTAGATGTAATATATGACTTTTTATAAAAAGGGTATCTATATGAACTTGACACAGTATTTTCAGCTTTTGTATTCCATACTA 36 36 5 8 1 58 8.5 30 524.5 227.5 297 2 IAD89694\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 60 0 0 0 0 44 52 0 38.5 21.5 0

chr3 14170716 14170935 AMPL7154796730 GGTGATGGAAATATTTTGTACCTTGCT GGAGCTGGTTTTAACTTTGACATGTTC GGTGATGGAAAUATTTTGTACCTUGCT GGAGCTGGTTTUAACTTTGACATGTUC tagatgttggtcagatggaatatacgtttgtggaaacctgccaaactgtacattgaatatctgtgtgtttttaccacatacagttaaaactaaaaaaaaaaaaaaaaaaaaaaaaaaattgagtataaataaatagcaaatttaatttatttttaaaaaCTAGTTTTCATTCTGTTACTGTTTCTTTTTCTTCAGTATTCCAGTACCAGTACCCGGAGA 32 34 6 5 1 59 0.5 3.5 578.5 272.5 306 2 IAD62412\_182\_primers\_U.txt 1 1 1 1 0.182639754 7.9233e-05 0 0 0 0 0 0 0 0 0 44 54 0 4 3 0

chrX 15840790 15840984 AMPL7154418947 ATCCAAATATCAGAAATGTACCTTCGGAAA CTCCTTTCGGAGTTCTTCCCAAA ATCCAAATAUCAGAAATGTACCTUCGGAAA CTCCTTUCGGAGTTCTUCCCAAA GGATAAAGTAGCATCTTCAGAATATGCAGTGATAAGTGCTGTTTCATCACTGTGCCATTGCAGGTTTATTTGAAATACAACAATGTCCAAGAGGAAAGCACTGCAACTTTCTTCATGTGTTCAGAAATCCCAACAATGAATTCTGGGAAGCTAATAGAGACATCTACTTGTCTCCAGATCGGACTGGCTCCTCC 36 28 6 4 1 80 8 12 22 9 13 1 IAD77467\_182\_primers\_U.txt 1 1 0.75 0.5 0.729166625 0.333333 0 0 0 0 0 0 0 0 0 44 46 0 20 4 0

chr2 152477402 152477590 AMPL5258454175 GTGTGGCTGGCATGATGG TGGTCTTCCTTTGGCAGAAAATATACTT GTGTGGCUGGCATGAUGG TGGTCTTCCTTUGGCAGAAAATATACUT AAGAAATGTTAGGACTTGATCAGCTCTTACATCACTGGCAATATCCCGAGAGGCCTTGGCAGCCACAATGGGAATGGCATCACTTCTCAAGTCATAGCCTTCTTTCTTGGCTTCTTCCATGGCCTGACGATAGAGGCTCTGAGGAAAGAAGGAGTAGCTTTTAAATATAGAATTCACATTCACTCGAA 24 38 5 6 1 83 273 213.5 626.5 331 295.5 2 IAD43040\_95\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 486.5 59.5 1

chrX 67412684 67412900 AMPL7153631452 TTCAACTATTCTACCACATTTTAGCAGTGT CCCTTCCTATCTGAATTGACCCTAGT TTCAACTATTCUACCACATTTTAGCAGUGT CCCTTCCTATCUGAATTGACCCUAGT TCCTTTCTCTTCCAGTCACATTTCTTTGTAACACATAAAGTACTCCCAATAAGAATTATCAAAGTAAAATTGTTACCAAAAAAGGCATTCAGCAGCTTCTGAACCTGAATATTGCTGCCCACAGTGCGGTACAACCCTTCTGTCTTGATCCCTAGTGGAGGAAAAAATCAGGTTAATTTCACTTGTATAGCTAGAGTTGTCATCTCCCCTTGGTAC 42 34 6 6 1 86 1.5 1 4 2 2 2 IAD83650\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 2.5 0.5 0

chr2 160901278 160901600 PLA2R1\_29.91041 ACCATTCCCTGAGTGCTTCTTTAAATTA ATTCAAGCAGGTAAATCGGTTCTG ACCATTCCCTGAGUGCTTCTTTAAATUA ATTCAAGCAGGUAAATCGGTTCUG TTTTACCTTTGTGTAGATATTCACAAATGTCTCCACCACCTGACCCATAAGAAATCCACTTATGAATATACTTCCGTGAGGCCACCACTGTGTTGTCATGCGCCACCTGGACAGAGTACTGCAGCGGGCCTGTGATCATCTTCCTGTTACAGCGCCACCGTAAGGAAACGAGGGTGGAGTCACATTCATATAAGCTTAATGGCTGCTCTGGGGCGGAGAAATTCAGGCCCAGGCAACCACTGCCTCCTATGTTAAAGAGGCCATGGTTTGAAACCCATTTCCACAGCATGTGCTTGTTTGCTTGCTTGCAGTTCTCCAGGGT 40 32 6 5 1 158 0 0 637 319 318 1 WG\_IAD76560.20150714\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 56 0 0 0 0 44 48 0 0 0 0

chr5 36671189 36671362 AMPL7153199678 TGGGAATGCGAGCTGTAGTCTA GTCTGGATGGCGAAAATACACC TGGGAAUGCGAGCTGTAGTCUA GTCTGGAUGGCGAAAAUACACC TATATGACTACCACCATCATTGCTGTGGTGATTGGCATAATCATTGTCATCATCATCCATCCTGGGAAGGGCACAAAGGAAAACATGCACAGAGAAGGCAAAATTGTACGAGTGACAGCTGCAGATGCCTTCCTGGACTTGATCAGGTATGTCCTTGCAAGCCCGTCCTTTGG 42 24 5 4 1 81 255.5 236 539.5 283 256.5 2 IAD50814\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 44 0 0 0 0 0 0 0 491.5 19.5 1

chr22 36712563 36712733 AMPLP762342176 GTAATGAAGGGCAAGGCTCACA CCTTTGTATCTGACACCACGCT GTAAUGAAGGGCAAGGCUCACA CCUTTGTATCUGACACCACGCT CAAAGATCTCGAAGCCGGCAATGTCCAGGATCCCGATGAAGGAGGCGCCCTGCCTCTTGGTCTTGTCCAGAGCCTTGTTGATGCGCAGCACCAGCCAGCGGAACATCCGCTCATAGGTCGCCTTGGCCAAGGCCTCGATGGCAAAGTCAGCCTGCGGGGCACACCCGGGG 40 36 3 4 1 0 906.5 189.5 229 497.5 244.5 2 IAD78091\_236\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 44 0 0 0 0 0 0 0 1096 717 2

chr11 64577233 64577429 AMPL7154623258 ACATCGGAGACCTTCTTCACCA TGGAGCATTTTCTGGCTGTCAA ACAUCGGAGACCTTCTUCACCA TGGAGCATTUTCTGGCTGUCAA CTCACGGCTGGAGACACCCCCTTCTCGAGGATAGAGGGACAGGTCGACGGCGCCTCGGATCTGGGCGGTGAAGCGGGCATAGAGGGCGGCGATGATAGACAGGTCGGCCACGGGAAAGTAGGTGAGGCCGCCAGGCGGGTCGGGGGCGGGGCTGGGCTGGAAGGTGAGCTCGGGAACGTTGGTAGGGATGACGCGG 38 26 3 4 1 134 267.5 223.5 532.5 282 250.5 2 IAD86095\_188\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 44 0 0 0 0 44 44 0 491 44 1

chr14 23450985 23451161 AMPL7154242836 GGTCGTAGCCCATGCTGATG CTTGCCTCTACCTCAGTCGTT GGTCGUAGCCCATGCTGAUG CTTGCCTCUACCTCAGTCGUT CGCTGGTGCGATTGCTGCAGGGCCGGCTACCTCCAGCTCCGCCAGCCCCCGCCCCGTCCAGCAGCAGGCTGCCCCGGGGGCTGGACGGCTTGCTCGCGTCGCTGGCCGAGCTACTGGCGAAGCTAGAGCGGGGGCTGAGGGCCGGGGCCGTGGGCTCCAGCCGAAAATCGGGGGGC 38 32 5 6 1 133 255 251 558 296 262 1 IAD92582\_188\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 42 0 506 4 1

chrX 39913101 39913326 AMPL7153071551 TAACTCCTGTCACCTCAAGAGCA TGTGGACATCTTGCTGTAGTTTACTG TAACTCCUGTCACCUCAAGAGCA TGTGGACATCTUGCTGTAGTTTACUG CTCAGCTAGTTTTCAATCACATGACAGCCATGCTCACCCCTGAGCCACAGATACTTGGATGTTATAACACGGTAAGAGGGGGGTCTCTGAAAATTCAAATTCAAACACATCGCTATAGGCATCGTCATCATCATCCTGGTCTTCTGGTCCTGGGGGGTTGGCTAAAACATCATAGCCACTTTCATCATCTGGTTCTAATGGAGGGCAAATAAGAGAGGAAGGAAT 24 34 4 7 1 103 255 236 569 311.5 257.5 2 IAD94568\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 491 19 1

chr2 21246393 21246605 AMPL7153609447 AACCTAAGAAATCAAAAGGCAAACAGAATC GGAGGTTGTAATTAACAAAACCGACTTTAA AACCTAAGAAAUCAAAAGGCAAACAGAAUC GGAGGTTGTAATUAACAAAACCGACTTUAA TACGTTGGCTACTTCCAGTTTTACTCCAGCCTTGGCTCCGGGAGCAATGACTCCAGATGAAGATATTTGCAACTGTAATCCAGCTCCAGTGGGGAGTTCAAAGGCATTCTCCATGAAGATGTAGTGAAGAAAAAAGTCATTCTTTGAGCCCTTCCTGATGACCTCTCCAATCTGTAGACCCAACAAGGGAGAGCAAATAAAAGTAAGTCTTT 44 38 3 4 1 94 0 0 0 0 0 2 IAD84176\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 60 0 0 0 0 0 0 0 0 0 0

chr2 31779660 31779761 AMPL4244115249 ACAGAAAGATCATTTTGCCTGAAGTCT CAAATTGATGCCAGGGAAAAGCAA ACAGAAAGATCAUTTTGCCTGAAGUCT CAAAUTGAUGCCAGGGAAAAGCAA TGATGGTTGCCTTGCATGTTGAGAATGATCACACAAGGTGACTTTGGCTCATCCCTTCTAAGGTGGCGGATAAGGAGTAGTCAGTGATGCAGGATTTCATT 32 46 4 2 1 46 631 540 1252 674 578 2 IAD46487\_93\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 54 0 0 0 0 44 44 0 1171 91 2

chr15 64050391 64050586 AMPL7156151559 CTTACGGTCTGTGCATCAGAGA GACTAAAACTGTCTTGACTATTTGTTGCAT CTTACGGUCTGTGCAUCAGAGA GACTAAAACTGUCTTGACTATTTGTUGCAT ACTAGGAGCCAGTTTGGGTTGCAGTATTTTCTCCTGTGTACCTTCTACCAACTGATGGCTGCTATTGCTCCCCCAAACATAAACCTCACAGGTTTCGGAGACAATGGGAGCATCACCAGTCTGAATGCTATCTGGGCTAGCACATGTTCTCGAATAATCAGAAGCCATTCTGCAAACCTATTAAAAATTTAAAAT 22 34 5 7 1 84 217 270 553 265 288 1 IAD60530\_188\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 44 0 0 0 0 0 0 0 487 53 1

chr6 33269549 33269644 AMPL552623492 GAGTGCCCTCACTCTGCTT AGCCTCATCCTTCTCCCATCAT GAGTGCCCUCACTCTGCUT AGCCTCAUCCTTCTCCCAUCAT TGGAAGAGAGGAAGGTGGTGAGGAATTCAGGATATTAAAAGGCAGTTGAGGTGTACATGGTCAGTTTAGAGACATATAAACTATCATGGGCACAG 28 32 5 5 1 41 587.5 520 1224.5 651.5 573 2 IAD47675\_93\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 1107.5 67.5 2

chr1 171605325 171605505 AMPL6235226205 CGACTGACTGCTTACGGATGTTT CGAGACAGTGAAGGCTGAGAAG CGACTGACUGCTTACGGATGTUT CGAGACAGUGAAGGCUGAGAAG CTCCCAGGTTTGTTCGAGTTCCAGATTCTCTGGGTTCAGTTTGGAGAGGACAATGGCACCTTTGGCCTCATCGGTGCTGTAAATGACCCAGAGGCCTGCTTCATCCACAGCCAAGTCAATGTCCGTGTAGCCACCCCAAGAATACGGGAACTGTCCGTGGTAGCCAGCTCCAGGGATTTC 36 26 5 2 1 97 622.5 515 1207 665 542 2 IAD46942\_93\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 46 0 0 0 0 44 40 0 1137.5 107.5 2

chrX 32632384 32632597 AMPL7152998822 GTGTATAGGTACTATACACAGAGTTTGCT TGTTCAGTAATAAGTTGCTTTCAAAGAGGT GTGTATAGGTACUATACACAGAGTTUGCT TGTTCAGTAAUAAGTTGCTTUCAAAGAGGT TCTAGTAGAAAGCACGCAACATAAGATACACCTACCTTATGTTGTTGTACTTGGCGTTTTAGGTCTTCAAGATCAGGTCCAAGAGGCTCTTCCTCCATTTTCCTTGTTCTTTCTTCTGTTTTTGTTAGCCAGTCATTCAACTCTTTCAGTTTCTGATTCTGGAGATCCATTAAAACTCTATGTAAACTGAAAATTTGAAAGAAGCCTATTATG 34 26 7 5 1 79 0.5 0 2 1.5 0.5 2 IAD81095\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0.5 0.5 0

chr2 179597034 179597258 AMPL7153021482 GGGTGGCATCTCCCTTCTTTAA GCTTTAGAGAGTTCCCTGGAACTCTA GGGTGGCAUCTCCCTTCTTUAA GCTTTAGAGAGTUCCCTGGAACTCUA AGCTGTGATGGCTCTAACTTTTCAACAAATGTGGCAGGTTCTGTGGAAGGAAGGAAGTTATTAAGAAATGTGAGAAAGAGGAAAGAATTTATAACAAGGTTAGCACAAAGATGTCAAGAAAACAATGCAAACCTTTTACAAACAAGTTTGCACTGCATTCCACCCCTCCAGCGACATTGCTGACTTTACATGTGTACGTGCCCGAATCAGAGGTTTTTACTAAA 30 36 5 5 1 89 1 0.5 18.5 16 2.5 2 IAD51407\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 44 0 0 0 0 44 50 0 1.5 0.5 0

chr15 90631504 90631631 AMPL7153001668 CCTCTTTGTGGCCTAAGAATGAGG GGAGTGGGAAGTGTACAACTTCC CCTCTTTGUGGCCTAAGAAUGAGG GGAGTGGGAAGUGTACAACTUCC cattacagaagaaaggaaagccacgagacagagatgaagagacaAGCTGGGAGAGGAGGGGCCCAGGATGCCCAAGCCAGCCTCACCTCGTCGGTGTTGTACATGCCCATGCCCACGCCGCCTGCGG 30 36 5 4 1 77 5 1 6 5 1 1 IAD70902\_231\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 46 0 6 4 0

chr2 166771613 166771935 TTC21B\_15.361821 GGACCACATTCAGAAAACGATCTGTAAA ATCTTTACAGCATGAGGCAACCAA GGACCACATUCAGAAAACGATCTGUAAA AUCTTTACAGCAUGAGGCAACCAA TATTTGTGAAGCAGTTGAAAGAAAGTTAAAAAAAAATTGGGAATTAATACTAGTGGCTAAATGTATCAAAATATAATGGGTTAAGACAATTACTTACCTAAAACAAGTGATATATAACATTTTATCTTTTCTGTGCTTCAGATAAATATCTGCCATTTTTTCTCTGGCCTCTATAAAATAAGGCTGTTCGGCTGTAACATTCTGAAGGATGCTTAAAGCCCGTTCAATATCTCCTTGGGCTAGAGCAAGGTCTGCATTAGCAATGGTAACCCGCACTTCTTCAGATGTTCCAGAAAATTCATGGATGGCATCTTGTAAAACT 40 34 4 3 1 112 3 0 366 166 200 1 WG\_IAD76560.20150714\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 48 0 3 3 0

chr3 9719619 9719787 AMPL2730631370 GCAAGCTTCCCCATCACCTAA GGCATCAAGAGTCTCCTTGGTC GCAAGCTUCCCCATCACCUAA GGCATCAAGAGUCTCCTTGGUC CTCCTCTGGTGGCCAACCCACATCTCACAGGAGTCTTTCTGTCCCCAGGACTACGTTGATGCCCCATTGAGCATCCCCGACTTCCTGACTCACTCTCTGAACATTGACTGGAGCCAGTATCAGGTGAGGGGCCTGACTCAAGCATTGAGGGCAGGATAAGGGAGTGGT 34 34 3 5 1 94 236.5 254.5 533 257.5 275.5 2 IAD44951\_93\_primers\_U.txt 1 1 1 1 0.875 0.5 0 0 0 0 0 0 0 0 0 0 0 0 491 18 1

chr1 155205421 155205647 AMPL7153133967 TGTAGAGTGATGTAAGCCATCCGAT CGCCTTTGTCTCTTTGCCTTTG TGTAGAGTGAUGTAAGCCAUCCGAT CGCCTTTGUCTCTTTGCCTTUG TAGGAGATGATAGGCCTGGTATGGAATGGGGGTGCCCGCCCTCCACTCACCTGAAGTGGCCAAGGTGGTAGAACATGGGCTGTTTGTAAAACGTGTCCTTGGTGATGTCTACAATGATGGGACTGTCGACAAAGTTACGCACCCAATTGGGTCCTCCTTCGGGGTTCAGGGCAAGGTTCCAGTCGGTCCAGCCGACCACATGGTACAGGAGGTTCTAGGGTAAGGA 28 32 5 5 1 124 0 0 0 0 0 1 IAD64871\_182\_primers\_U.txt 0.5 0.5 0.5 0.5 0.625 0.5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr8 61728995 61729139 AMPL7154600801 GGGCATCTATAGAAGATCTGGAAAAAGAT AGCACCAAATGAGACTAACTAGTTTTTCTT GGGCATCUATAGAAGATCUGGAAAAAGAT AGCACCAAATGAGACUAACTAGTTTTTCUT AGAGAATTCAGCAAAAAATTAAACGATTTAAGGCAAAGCAGGGCCAGAACAAGTTCCTTTCAGAGGTACGACATACCTGCTTACTTTTCCAAAGTATTTACTTTGTTAAAATGTTCTAAATTTAAAATTTTAGTTCCATGAATT 26 44 5 5 1 45 577 517 1170 619 551 1 IAD69405\_185\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 58 0 0 0 0 0 0 0 1094 60 2

chr1 45797286 45797381 AMPL7154392119 GCTGCCGATTCCCTCCATTC GCCACCTGTGTTCTGGAACAG GCTGCCGAUTCCCTCCATUC GCCACCUGTGTTCUGGAACAG CTCTTGTTACTCATGCCACTGCCCTCCACGCCCAGTATCCAGGTACCTGAGTTGGGCCTCTGCACCAGCAGAATTTGGGCCCCAAGGGCCCCAGG 28 22 4 4 1 58 548 461 1060 577 483 1 IAD89715\_185\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 42 0 1009 87 2

chr7 107302137 107302370 AMPL5334544220 GCAGCTCCCCGAGTACAG GGCCTCTGGGAGAAGCA GCAGCUCCCCGAGUACAG GGCCUCUGGGAGAAGCA TGCAGCTACATGGTGTCGCGGCCGGTCTACAGCGAGCTCGCTTTCCAGCAACAGCACGAGCGGCGCCTGCAGGAGCGCAAGACGCTGCGGGAGAGCCTGGCCAAGTGCTGCAGGTAGCGGCCGCGCGGGCCTGCGTAGAGAGAAGCGGAGCGGGGCGTCCACGCCTTGGGGAGGGAAGGGCGTCCCCAGCGGGCGAGAGTGGGGTGCGGGCGGCGGAGCCCCTGGGCGCCAGC 26 32 2 2 1 170 2 0 3 3 0 2 IAD43799\_92\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 36 0 0 0 0 0 0 0 2 2 0

chr17 29663365 29663522 AMPL7154395406 TCCTTCTTCAACTAGATTACAGATCTGCT AAAACCTCCTGATGATAAAACAGATATGCT TCCTTCTTCAACUAGATTACAGATCUGCT AAAACCTCCTGAUGATAAAACAGATAUGCT GATGTTGTACTAGACAGTTTCATCAAAACCAGTGCAACAGGTGGCTTGGGATCAATAAAAGCTGAGGTGATGGCAGATACTGCTGTAGCTTTGGCTTCTGGAAATGTGAAATTGGTTTCAAGCAAGGTAATCACTTTTCTTTTGCCTTCTGTACTAT 34 34 6 6 1 64 548 568.5 1186 581.5 604.5 2 IAD73769\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 58 0 0 0 0 0 0 0 1116.5 20.5 2

chr5 35619838 35620050 AMPL7154350512 AAAAACACCCTTTGCTGAAGTCC CTTCCAGATCTACACTTCAGGAGC AAAAACACCCUTTGCTGAAGUCC CTTCCAGAUCTACACTUCAGGAGC CAGGACTCTATTGCAACATTTTGAAATACTTTTAGGAGAAATAAATGAAATTAATAAAGATACATAAAATAAAAACAGTAGATGCCATTATAATTTTAATTAGTTTTGGGAATTTAGGTTTTGAGAGGTGGAGGATAAACATAAAAGGGCTGAAGACTAAGTAAGAATTTTAACAACATTTAGGCTATGGATAGAAAATTCCTGGCGTCTGT 28 24 3 4 1 0 7 3.5 1 7 5.5 2 IAD56329\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 10.5 3.5 0

chr1 100459158 100459377 AMPL7155719860 TTCCCTGGGAATTTTGGTCTTTCA TAGGCCATTCGACAATGCAAGA TTCCCTGGGAAUTTTGGTCTTUCA TAGGCCAUTCGACAAUGCAAGA ACTACCAGTTTGGTTCTAACAATGCGTTATTCCAGAACTTTAAAAGAAGAAGGACCTCGTTATCTATCTTCTACAGCAGTGGTTGTTGCTGAACTTTTGAAGATAATGGCCTGCATTTTATTGGTCTACAAAGACAGCAGTAGGTATCTAGGTTTTTTGTTTTTAATCAATGCAATTTATTTAGTTTGCATATATATATTGGTAACTACACATTTGCAC 34 22 5 2 1 75 273 241 562 300 262 1 IAD90672\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 48 0 0 0 0 0 0 0 514 32 1

chr10 123279478 123279601 SP\_18.60997 CCCAGTTGTGGGTACCTTTAGAT TCGGAGGAGACGTAGAGTTTGT CCCAGTTGUGGGTACCTTUAGAT TCGGAGGAGACGUAGAGTTUGT CAGAAAGTCCTCACCTTGAGAACCTTGAGGTAGGGCAGCCCGTCGGGCCCGTATTTACTGCCGTTCTTTTCCACGTGCTTGATCCACTGGATGTGGGGCTGGGCATCACTGTAAACCTTGCAG 28 40 4 2 1 68 523 551.5 1173.5 564.5 609 2 CLv2\_CF\_175.10.20150122\_primers\_U.txt 1 1 1 1 0.875 0.5 0 0 0 44 46 0 0 0 0 0 0 0 1074.5 28.5 2

chr10 71139554 71139691 AMPL6155458010 GTCCCTTTCCAGCACCTTTGA GCAAACGTGCTGGACTGAGA GTCCCTTUCCAGCACCTTUGA GCAAACGUGCTGGACUGAGA CTCAGTGCTTTGCACTGCCTCATGTGGTCCTCAGTGCATCAGTATTGGCTTCTAACTTCACAGGAATAAGGAAGGCCTCCACAATGCCAAAGAAATCCTGACCCGCCTGGGAGTGGAGCCGTCCGATGATGACTGTG 32 24 3 3 1 73 259 229 515.5 275.5 240 2 IAD45159\_93\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 488 30 1

chr12 79565996 79566168 SP\_180.34868 TCGTTGGAGAGTTCTTTCATCACTG CATTGGATGAACTCCGCAGACTTATTA TCGTTGGAGAGUTCTTTCATCACUG CATTGGATGAACUCCGCAGACTTATUA CTTCTCATATTTTAAATTTTTTTCCAAACATAAAATGCATACATTGAATAACCTAACTTTAGGTATACTGAGACTTCATTTTATAATGAACAGTTACATGAAGAGTGCCTGCTCCCAAAAAAAGGAGTTATAATGCTTCAATTTTAAGTGGTAAGACATTTACTGGGACACA 34 36 5 5 1 52 0 0 0 0 0 1 WG00042.3.20140613\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr5 112128061 112128236 AMPL7153017959 AGAATGATTTGACATAACCCTGAGCTT CTATTTTTATACCCACAAACAAGAAAGGCA AGAATGATTTGACAUAACCCTGAGCUT CUATTTTTAUACCCACAAACAAGAAAGGCA TAAGTGGTAGCCATAGTATGattatttctattaatattattaataaaaaCATAACTAATTAGGTTTCTTGTTTTATTTTAGCGAAGAATAGCCAGAATTCAGCAAATCGAAAAGGACATACTTCGTATACGACAGCTTTTACAGTCCCAAGCAACAGAAGCAGAGGTTAGTAAAT 36 58 5 3 0 54 219.5 282 607.5 295.5 312 2 IAD59586\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 501.5 62.5 1

chr2 26703158 26703243 AMPL3712043547 AGGAAGGCTCCAAAGAGAAAGAATT CCTGTCTGTGAGACGGAAGGA AGGAAGGCUCCAAAGAGAAAGAAUT CCUGTCTGUGAGACGGAAGGA TTCCATTTTACCTGCACAGCTCTGTGGGGAGGCAGTTCAAAGCGTTCCTGAGCTTGAGTAAGGGTGGCAGGTCGGGGGCCAGGCC 38 38 2 4 1 51 545.5 528 1167 604.5 562.5 2 IAD43799\_92\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 50 0 0 0 0 0 0 0 1073.5 17.5 2

chr20 31023456 31023657 ASXL1\_13.2.96951 CAGTTACTGTCAACAGGTGGACATT CTTGTAACCAGACGCATGTCAC CAGTTACTGUCAACAGGTGGACAUT CTTGUAACCAGACGCATGUCAC AAAAGCTGAAAATCAACGGAGACTCTGAAGCACTGAGTCCTCACGGTGAGTCCACGGATACAGCCTCTGACTTTGAAGGTCACCTCACGGAGGACAGCAGTGAGGCTGACACTAGAGAAGCTGCAGTGACAAAGGGATCTTCGGTGGACAAGGATGAGAAACCCAATTGGAACCAATCTGCCCCACTGTCCAAGGTGAATG 40 40 5 4 1 104 725.5 709 1552 777.5 774.5 2 IAD76897.07202015\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 50 0 0 0 0 44 44 0 1434.5 16.5 2

chr5 133326458 133326683 AMPL7154126344 CGGAGACCATATTTTAGGTGCTGT CTGTGGAAGATCAGGTAATGGCT CGGAGACCAUATTTTAGGTGCUGT CTGTGGAAGAUCAGGTAAUGGCT AGCCCCCAAAACATTTTGTCACAAAGGGCTTCCACCACCTGCAACATCAGAGAACATCCTTGTGGAGAAAACAGATGAAACTCTTACCCAGTGTTAGGTGAGAAGGATGAATCGAAGGTCAGCTTCAGTCCACGTGCAAGCTGAACAGAAAAGAAATTTGCCACTAGATTTAGTCACAAGGCAGGCTGGCAGATGCGAATTAATAAATCCACATCTTTTCACAGC 30 30 4 5 1 101 279 224 535 290 245 1 IAD90672\_182\_primers\_U.txt 1 1 0.3595238571 0.166667 0.4345238571 0.125 0 0 0 0 0 0 0 0 0 44 46 0 503 55 1

chr17 68172358 68172531 AMPL7153309963 CAAAGAGGAAGACGACAGTGAAAATG ATCTTGACCAGTACCGTCATCTGTATA CAAAGAGGAAGACGACAGUGAAAAUG ATCTTGACCAGUACCGTCATCTGTAUA AGTTCCAGAAAGCACTAGTACGGACACGCCCCCTGACATAGACCTTCACAACCAGGCAAGTGTACCTCTAGAGCCCAGGCCCTTACGGCGAGAGTCGGAGATATGACTGACTGATTCCTTCTCTGGAATAGTTACTTTACAACACGGTCTGTTGGTCAGAGGCCCAAAACAGT 54 38 2 8 0 89 245 262.5 559.5 268.5 291 2 IAD34879\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 52 0 0 0 0 39 52 14 507.5 17.5 1

chr17 80901860 80901980 mon17\_8.1.18708 CTCTGGTTGCGCCTGCT GCCATTTATCTGGAATCTTCTTTTAATTGCA CTCTGGUTGCGCCUGCT GCCATTTATCUGGAATCTTCTTTTAATUGCA GGTGTGGAACAGGCGCACCATCGCCATGCCTGCAGCTCACAAAGCTCCTGCTGGCCTGGGATGCACTGAGGATGGAAGGAACAAGTGGCTTCTGAGAAAAACATGATGAACTGTTCTTAG 22 40 4 7 1 65 4 2 7 5 2 1 WG\_AMLoneshot\_plusCNV\_v1.20150518\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 34 0 0 0 0 44 62 0 6 2 0

chr8 63976732 63976927 AMPL7153198010 AAATTAAAAAGGGTTGGAATGTTTGGTGT AGTGTTCAAAGAAGAAACTTGACATTAGGT AAATTAAAAAGGGUTGGAATGTTTGGUGT AGTGTTCAAAGAAGAAACUTGACATUAGGT GAGGAACACAGACTTGAATATATTTTACTCACCCGTTCCTTAATTTTTTCAGTCAGGAATGGTTTGATCATGGAAAAGACAGCATGGAAAATTACTGGTTCATTTATCAAATGGATGCCACGAACTTTCAATGGAAATGAATCCTTTTGAAAATAAAAAAATCTTAATAACAAAACATAAATATTACAATCTGAT 34 48 5 4 1 59 240 259 540 263 277 1 IAD67654\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 499 19 1

chr5 127730751 127730880 AMPL7153178850 CTTGGTCTCCCAGAGAGCAAAAT GAGAATGACGAAAATGCAGTGCT CUTGGTCUCCCAGAGAGCAAAAT GAGAAUGACGAAAATGCAGUGCT CAGTACTGCTACTAATTTTCCTAACAGTGTCTGTGCTGAGGAGACTAACAGCCAGCCACGTACCAGAACCTCTGACAGGACAGGCTTCAGGAATGGTTCCGATGCCCCAGCAGCGGCCAGGCTCACAGC 44 38 3 3 1 71 247.5 245 499 251 248 2 IAD55055\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 46 0 492.5 2.5 1

chr17 41065801 41066029 AMPL7155291633 CAGTAACTCAGTGTCAGCAAGGT CCTCTGAGAGCCCAAATCCAGTA CAGUAACTCAGTGUCAGCAAGGT CCTCUGAGAGCCCAAATCCAGUA TTGGGTTATAGTTCAAGAAAGTCTAAACAGAGCCAGTCACAGCACCAAGGAATGCTCAAGGGAGCTATTGCAGGTTTCTCTGCTAAGAGATTTATTTCATCCTGGGTGCAGGGTTCGACCTCCAAAGGCCTCAAATCATCACCGTATCAATGGATTTCCTGAGGGTAAGCTCCGCTATTTCACACCTGAACTCCGGAGTCTGTATATTCAGGGAAGATTGCATTCTCC 28 50 4 4 0 105 707 790 1598 758.5 839.5 2 IAD69869\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 46 0 0 0 0 44 46 0 1497 83 2

chr7 101925805 101926028 AMPL7153847691 CAAGGGTTGGCCCACAGTA ACAGTCCCTCTCCATGCTCT CAAGGGTUGGCCCACAGUA ACAGTCCCUCTCCATGCUCT TAGAGGAGGTGCCTCCGTGTCTGGGCCCATCTGATCATCTGCAGAAGCAGTGGGTGCAGGAACATGTCTAAGACCCACCCGCCCCGGAGTCTGGGGCTCGAGAACCTTTATGTTCCAGGCCAGGCCCAGGGGCCATGGGTGGGCTGCAGGGGTGGCCTTGAGGCGAACGGGCAGCTCACCGTGTCTCCACCTGGCCAGGTGCTCTACAAGCTGGCATGGAGCG 32 26 2 5 1 142 576 670 1386 658 728 1 IAD59467\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 40 0 1246 94 2

chr5 112174409 112174550 AMPL7153080214 CAGATGAGCAGTTGAACTCTGGA GTCCAAAATGTGGTTGGAACTTGA CAGATGAGCAGUTGAACTCUGGA GTCCAAAATGUGGTTGGAACTUGA GGCAAAGTCCTTCACAGAATGAAAGATGGGCAAGACCCAAACACATAATAGAAGATGAAATAAAACAAAGTGAGCAAAGACAATCAAGGAATCAAAGTACAACTTATCCTGTTTATACTGAGAGCACTGATGATAAACACC 34 30 4 5 1 52 586 536 1334.5 708 626.5 2 IAD76297\_185\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 46 0 0 0 0 44 48 0 1122 50 2

chr5 1293828 1294008 AMPL7153085753 TTCCCAAGCAGCTCCAGAAACAG GTACGCCGAGACCAAGCACTT TUCCCAAGCAGCUCCAGAAACAG GUACGCCGAGACCAAGCACUT GGCCGCATTTGCCAGTAGCGCTGGGGCAGGCGGGGCAACCTGCGGGGAGTCCCTGGCATCCAGGGCCTGGAACCCAGAAAGATGGTCTCCACGAGCCTCCGAGCGCCAGTCAGGCTGGGCCTCAGAGAGCTGAGTAGGAAGGAGGGCCGCAGCTGCTCCTTGTCGCCTGAGGAGTAGAGG 34 56 2 2 0 121 253.5 243 559 267.5 291.5 2 IAD49522\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 42 0 496.5 10.5 1

chr9 117825943 117826065 AMPL7154048821 CCAAATAAGGGATGTGACATTTAGGAAG CTCTGTTGAAGTCTTGACAGGTATTCTAG CCAAATAAGGGAUGTGACATTUAGGAAG CTCTGTTGAAGTCUTGACAGGTATTCUAG AGCAGAGATGATTCACTGGTATTTCCCCAATGTGGTAGGAGCTGATCCCAGTTTAAAGCAAGAAAGTGCTTTGATTCCTCCCGAGCAGAGACAAAGGGGAGGAAGTGAATTAGTGAATTCGT 34 38 4 8 1 55 254 255 557.5 278 279.5 2 IAD56329\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 56 0 509 1 1

chr1 116283276 116283502 AMPL7153080912 CAGGTTCTCCAGCTTGTCCTTT GCCAGACCTCAGCCAATACAAT CAGGTTCUCCAGCTTGTCCTUT GCCAGACCUCAGCCAAUACAAT TTTGGGGTTCTATCTCTCCCTATATTTGAGGAGAGGCAGCTCCATGCAGGGTCACTGTGTATAAATACTTACATCCAAGAGGAACTCCACCAAGACATCAGCTGCAAACTCGCCATCAAACTCTATTGTGCGATCACCCTTAAGAATATACAGGCTTCCTTCTTCATCAAAACCTGTAAGAAACAAAGAGGCCCACAGAGAAGGTCATCCTGACGTAGGAAGAGTG 38 28 5 2 1 103 472 542.5 1157 544.5 612.5 2 IAD62412\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 1014.5 70.5 2

chr4 39246026 39246247 AMPL7152998159 GAATATGAAGGTCCTCTTTTCTCTGCA ATGGACAGAGAGAAAGCATGGCAA GAATATGAAGGUCCTCTTTTCTCUGCA AUGGACAGAGAGAAAGCAUGGCAA CAATATACATGTGGTCTTTTATACATAATAACTTAGTATTTTAATAATCCTGTCTTATTTTAGCAATTTTCAGAAGCGGCCCAACTGTATGAAAAAGGTCTCTACTACGATAAAGCAGCATCTGTTTACATCCGCTCTAAGAATTGGTAAGAGCTGCCTGCGGTTTGTTTCTGAACAGGATTGGAAATGAATGTGCCTCTGGGGTCTCCCCACTTGCCTCC 32 48 7 2 1 88 232 275 548 255 293 1 IAD50452\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 54 0 0 0 0 0 0 0 507 43 1

chr16 2138452 2138639 AMPL7153043717 CGCCTCTGCCTTCAGATCTG CTGACAGGCAATACCGTCCAA CGCCTCUGCCTTCAGATCUG CTGACAGGCAAUACCGUCCAA GAGGAAGCCGCCTACTCCAACCCCAGCCTACCTCTGGTGCACCCTCCGTCCCATAGCAAAGCCCCTGCACAGACTCCAGCCGAGCCCACACCTGGCTATGAGGTGGGCCAGCGGAAGCGCCTCATCTCCTCGGTGGAGGACTTCACCGAGTTTGTGTGAGGCCGGGGCCCTCCCTCCTGCACTGGCC 34 34 5 3 1 124 203.5 307 681 345 336 2 IAD53548\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 42 0 510.5 103.5 1

chr4 152978086 152978251 SP\_629.1558 AAGATTTCAAATGCTTGTTCCATGTTGT GCTTTCTCACAGCAGTGTTAATCCATAT AAGATTTCAAATGCUTGTTCCATGTUGT GCTTTCTCACAGCAGUGTTAATCCAUAT tctaggctctctattccgttcgattgctctatgtgtctgttttttgctagtaccaaacagttttggttactatagctttgtaatatattttgaagtcaggtagtgtgttatttccagctttgttctttttgctcaagattgctttggctatttgggggtcatagg 36 46 6 6 1 62 0 0 0 0 0 2 WG00042.3.20140613\_primers\_U.txt 0.4895833333 0.125 0.28275176 0.0238095 0.1950785435 0.000127275 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chrX 49079465 49079540 AMPL7154624821 GTGGGTCTGGTCAAAGTTGAACT CATCCCTGCTCAATTCAATGAAATCC GTGGGTCUGGTCAAAGTUGAACT CATCCCTGCUCAATTCAATGAAAUCC GCCCCCAAACAGCTGCATGCCAAGCAGGGAGAAGATAATGATGAAGAGGAAGAGGAGAAGCAGCAAGGATGCGAT 26 32 5 6 1 39 286 223 537 296 241 1 IAD59841\_185\_primers\_U.txt 1 1 1 1 0.8333333333 0.5 0 0 0 44 46 0 0 0 0 44 52 0 509 63 1

chr2 179586446 179586665 AMPL7154560393 CACAACTTTGATTAATGTTGCCTCCAA GGGAAACACTCCTCATTTGAGAATTCT CACAACTTTGAUTAATGTTGCCUCCAA GGGAAACACUCCTCATTTGAGAATUCT ACTAATACACAAATTCTAACATGTCCAGTTAGTTTCTCTCAAACATTTAAAAACCAAAGAAACTTTTATAAGACAATTATGCAAATATGGTAAGGAACAAATATTGTCAAAAGTCATGGAATGATACCTTTTACACTGAGCTGAGCTGAGCACATGTCTTTGCCAACATCATTGGTTGCTTGGCAAGTATATTGACCAGAGTCTCCTTTGCCTACTTTA 30 38 5 4 1 76 286.5 221.5 634 337.5 296.5 2 IAD62412\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 54 0 508 65 1

chr13 39456995 39457207 AMPL7155750948 TGTTAGAGCAAGTATACTCAATCAACTTGC AGGACAGAGAAGGATAAATATTTGGTAGGA TGTTAGAGCAAGUATACTCAATCAACTUGC AGGACAGAGAAGGAUAAATATTTGGUAGGA GATATTTTAGTAGTTAACAGCTTCCGAGCCTATCATGCAATTTGGAGTCTGTCAATGAATATAGCAATCGGTGAAGCATTACTGTACGAAGTCTGTTTTCAGGCTTTGGGTCAAGCTGGTTTTATACCAAATTTCACTCTACAATGCATATTCTAATGAAGCTACTTTATATAAATTGGAGAGCTTATAAAATGCAGAACATTTCTATCCTA 36 42 6 4 1 74 7 10 18 7 11 1 IAD58594\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 60 0 0 0 0 44 60 0 17 3 0

chr10 104263883 104264039 AMPL7154651741 GTCGTTTGCCCTCTCCAGTT GTTCGGCTGGTCAGGGTAAA GTCGTTTGCCCUCTCCAGUT GTTCGGCUGGTCAGGGUAAA CCCCAGTGCCTGCCCTACGCACCCCGATGGCGGAGCTGCGGCCTAgcggcgcccccggccccaccgcgcccccggcccctggcccgactgcccccccggccTTCGCTTCGCTCTTTCCCCCGGGACTGCACGCCATCTACGGAGAGTGCCGCCGCC 36 28 5 4 1 123 0 0 0 0 0 2 IAD71397\_183\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 40 0 0 0 0

chr3 151986193 151986394 AMPL7156619515 AGGTTCAAAAACTGTTTGGTGCATTT CCTCCCGTTGGTATCTTCCATC AGGTTCAAAAACUGTTTGGTGCATUT CCTCCCGTUGGTATCTTCCAUC AAGGCGGCAGTCTCACCAGATCGCAGGATTCTAGTCTAATTGGCTTCTAACCTTCAATCTAACCTTGCCGGCTTCCTTGCAAAGCCCGGTGCAAGGGCCTCTTTCAAAATGAACCCACTGGTGTGCCTAGCAGTCGGTAGAAGAAGCGGGAGGGCGTCCGGTCTGCACGCCCGCCGCGAGGTTACAATGCTGAACGCATGA 32 32 5 6 1 112 467 810 1459 605 854 1 IAD46040\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 52 0 0 0 0 44 44 0 1277 343 2

chr19 18084497 18084712 KCNN1\_1.92603 GATGTTTCTGGGATGGTAAACCCA GCCCCACGCTGCCATTGTA GATGTTTCUGGGATGGUAAACCCA GCCCCACGCUGCCATTGUA GTGTCAGCACTCTGGGCCACTCCCAAACTTAGAACGTTCTGGGTTGGCCGGGATGGTCCTTGCCTTTCTGGTCAGTAAGCTGGACCCTGCTGTGACCATGTCCCTCTGTGCCCTTGCAGGTCAGTGCAGGAGCCCAGCCGCTGAGCCATGCCGGGCCCCGGGCGGCCTGCAGCGAGCCCAACCCCTGCACCCAGGTAGTCATGAACAGCCACAGC 24 34 5 3 1 138 11 9 61.5 36 25.5 2 IAD53887\_WG.20140521\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 38 0 20 2 0

chr17 29550438 29550610 AMPL7153007035 ATCTGCATTAGGTTATTGATGATGCTAGTA TCACCATTACCATTCCAAATATTCTTCCAT ATCTGCATTAGGTUATTGATGATGCTAGUA TCACCATTACCAUTCCAAATATTCTUCCAT CAATGAACTTTATGTTACTGCAGCTCACAAATGCTTTTTTACATCTGCAAGAAATTAACTAGTCATCAAATGCTTAGTAGCACAGAAATTCTCAAGTGGTTGCGGGAAATATTGATCTGCAGGAATAAATTTCTTCTTAAAAATAAGGTAAGCAAAATGACATATTTAAAAA 38 34 9 5 1 53 543.5 548 1155.5 575 580.5 2 IAD73769\_182\_primers\_U.txt 0.4 0.2 1 1 0.647619 0.2 0 0 0 44 60 0 0 0 0 0 0 0 1091.5 4.5 2

chrX 153786738 153786896 AMPL7153375547 TGCTGACAGGAAGTGGCTTTTT CATTGCTTTTGGAAACCCTGGAA TGCTGACAGGAAGUGGCTTTUT CATTGCTTTUGGAAACCCUGGAA TCCTGCAGCAGATGGCTGAGGACAAGGCCTCTGTGAAAGCCCAGGTGACGTCCTTGCTCGGGGAGCTGCAGGAGAGCCAGAGTCGCTTGGAGGCTGCCACTAAGGAATGCCAGGCTCTGGAGGGTCGGTGAGTCGGGGGAGCCGGCTCCGGAGACCCC 40 26 3 3 1 103 0 0 0 0 0 2 IAD48111\_124\_primers\_U.txt 0.5 0.5 0.5 0.5 0.5 0.5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr5 89694236 89694352 mon5\_7.5.11562 CTATAGGCCTTCAATGGAAGTCTCATG TATGCTATTCGTTTCATCCTGCTGTT CTATAGGCCTUCAATGGAAGTCTCAUG TATGCTATTCGTUTCATCCTGCTGUT TTCATAGAGCGTTATGGGAAGCTTTTGGGAAAAAGATGGTGTTTAATATTTACCTGAGAGAATGAATCACATTTTAGCAGGCAGAAATTAACAATTAGAGCATTCTAAGATTAAGA 40 34 7 8 1 38 0 0 0 0 0 1 WG\_AMLoneshot\_plusCNV\_v1.20150518\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 54 0 0 0 0 44 52 0 0 0 0

chr3 72985348 72985505 SP\_52.4898 CACAATACTACTCAGCCAAAAAGCATTT ATACTCTACCCAGAGTTACATTTGTTGG CACAATACTACUCAGCCAAAAAGCATUT ATACTCTACCCAGAGUTACATTTGTUGG aggagaattgcttgaacctgggaggcggaggttgcagtgagccaagattgcgccattgcgctccagcctgggtgacagagcaagactccatctcaaaaaaaagaaaaaaaaaaaaaaagaaaaaGAAGAGAAAATCAGGAAGTCGTGGAAGAAACTT 40 44 4 6 1 70 0 0 0 0 0 2 WG00043.3.20140613\_primers\_U.txt 0.1637023762 1.50836e-05 0.213405436 9.3902e-06 0.05199585126 7.40905e-06 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr7 116423367 116423486 7153033058 TGTCCTTTCTGTAGGCTGGATGA GGTGGTAAACTTTTGAGTTTGCAGA TGTCCTTTCUGTAGGCTGGAUGA GGTGGTAAACUTTTGAGTTUGCAGA AAATTCACAGTCAAGGTTGCTGATTTTGGTCTTGCCAGAGACATGTATGATAAAGAATACTATAGTGTACACAACAAAACAGGTGCAAAGCTGCCAGTGAAGTGGATGGCTTTGGAAAG 32 30 6 4 1 48 237.5 253 524.5 255 269.5 2 WG\_IAD51217.20140604\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 46 0 0 0 0 44 48 0 490.5 15.5 1

chr17 29654498 29654717 AMPL7153006580 AAGAGTTTAATTCTTCTCCACTTCACCC GCGGGTCCGGATATGAATGAT AAGAGTTTAATUCTTCTCCACTUCACCC GCGGGUCCGGATATGAAUGAT GTCACCACCACTTTCCAGGTTGGTTCTACTGCTGTCCAAGTAACTTCAGCAGAGCGAACAAAAGTCCTAGGGCAATCAGTCTTTCTAAATGACATTTATTATGCTTCGGAAATTGAAGAAATCTGCCTAGTAGATGAGAACCAGTTCACCTTAACCATTGCAAACCAGGGCACGCCGCTCACCTTCATGCACCAGGAGTGTGAAGCCATTGTCCAGTCT 30 32 5 4 1 102 494 536 1104.5 534 570.5 2 IAD50383\_130\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 40 0 1030 42 2

chr12 85695343 85695501 AMPL7155751871 GGATACCACAATAAGCTGCTGTGT GCGTGATCATATTTCATTGACTTGTACAAT GGATACCACAAUAAGCTGCTGUGT GCGTGATCATAUTTCATTGACTTGUACAAT TGGAATTGCTAAAGGTCAAGATATTCAGTGAGACCAGCTTAAATGAATAGTTGTTATTTAACATTAAAATCTAAGAATGAACCTCTGAAAAGACTAAATAGGTTTACCATGTGCCAGTCTCCACAAACCCTGTTTTAGTAGTAAGGTTTTCTTTTTCT 32 32 5 7 1 53 242 260 529 259 270 1 IAD58594\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 48 0 0 0 0 44 60 0 502 18 1

chr11 32456196 32456406 AMPL5118863728 GGGTGTCCTAGAGCGGAGA CCTGAGCGCCTTCACTGT GGGUGTCCUAGAGCGGAGA CCTGAGCGCCUTCACUGT CCCTGGCGCCACTGCCCCGCGCGTAGGGGGCGCTCCCCGGCCTACTTACCCTGATTGCGAATAGCGGGCTGGCTCTCGAGGCAGCTGGGCAGGTAGGGCGCGTTAGGAAACATCCTGGCCTGGCCGGATGACGCCTGGCTGGGCGGAGGAGGACCGAAGGGCCCGTAGCGACAGGCTCCGGCTGTGCCAGTGAACTGGCCGGAAAAGTGG 32 36 3 3 1 145 237.5 264.5 749.5 364 385.5 2 IAD48187\_93\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 502 27 1

chr12 40699445 40699618 AMPL7154789486 ACACATACTGACAACTTATGACAAACCTT AAGTTGTAACTGACATCCAGAGATGTC ACACATACTGACAACUTATGACAAACCUT AAGTTGTAACTGACAUCCAGAGATGUC GGAAAGTTTTAAAACTCTGTTGAAAGGTTGTGCAAGCTGCTGATGGAATCTGTGAGCCTTTCTTGTTTCTTATCACGTTTTTTGGCAGAGCACATTTCTTCCTTCCCACCAACAGGTTTTGCCCTTTTTTTTCCCATTAAGATTCCTCCTGAGATTGGCTGTCTTGAAAATCT 42 40 5 6 1 70 10.5 9 45.5 21.5 24 2 IAD83172\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 54 0 19.5 1.5 0

chr13 95818331 95818439 AMPL7153433976 CACTTTGGGACAAAAGATGAAGCT TCTCAACAATCTTCTAGACCCTCCTT CACTTUGGGACAAAAGAUGAAGCT TCTCAACAATCTUCTAGACCCTCCUT TGAACAGAGTAGACCAAAGATCCATAAGGCCATTAACAGTGAACAAAACCAGGCCATGTTGTAACAGGAGGTGAACTCACATCTTGGCTCTCCAGAGCACCATCTTTC 32 36 2 6 1 49 529 540 1111 544 567 1 IAD52270\_130\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 50 0 1069 11 2

chr5 70241926 70242120 AMPL7153110189 ACCACCTCCCATATGTCCAGAT AGAGTAATTTAAGCCTCAGACAGTTGTATTTTT ACCACCUCCCATATGUCCAGAT AGAGTAATTTAAGCCUCAGACAGTTGTATTTUT CTCTTGATGATGCTGATGCTTTGGGAAGTATGTTAATTTCATGGTACATGAGTGGCTATCATACTGGCTATTATATGGTAAGTAATCACTCAGCATCTTTTCCTGACAATTTTTTTGTAGTTATGTGACTTTGTTTTGTAAATTTATAAAATACTACTTGCTTCTCTCtttatattactaaaaaataaaaataa 24 40 4 6 1 56 0 0 0 0 0 2 IAD95765\_183\_primers\_U.txt 0.5 0.5 0.5 0.5 0.5 0.5 0 0 0 1 44 44 0 0 0 0 0 0 0 0 0

chr17 37882730 37882858 232152124 GCTGTCCCTTGGGACTGTCTA CATGCGGGAGAATTCAGACAC GCTGTCCCTUGGGACTGTCUA CAUGCGGGAGAATUCAGACAC ACCAGACTGGAGGGGGAGTGGGAGGGGAGAGGCAGCAAGCACACAGGGCCTGGGACTAGCATGCTGACCTCCCTCCTGCCCCAGGTTGGATGATTGACTCTGAATGTCGGCCAAGATTCCGGGAGTTG 30 32 6 2 1 79 226 260 514 240 274 1 WG\_IAD59162.20140822\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 40 0 486 34 1

chr9 36840520 36840732 AMPL7153923668 GGTGGCTGTCACCCTCAATAG AGATCTTGGTGAGAGAGGATGGT GGTGGCTGUCACCCTCAAUAG AGATCTTGGUGAGAGAGGAUGGT TGCCATCAGTGTTTGGTGCCCGCCTGGCTCCAAGGGTCAGTGACGGTCATAGGCAGTGGCGGCTGCAGGTGGGGCGGCTCCTCGGGCGGCAGCGCTATAATAGTAGGGGGAGCCTGGAAGAGACGGGAGAGAGCACCGAGGTCAGATCCGGGGTCCCCTTTCCACCAGTCTCCTCCACTTCTGTCCTTTCCTCCCCTCACTCAGTCCGGGCC 28 28 5 4 1 137 267 239 569 300 269 1 IAD59467\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 506 28 1

chr8 144991760 144991886 AMPL7153021126 GGGTCGGTCAGGATCTCGT GCCATGAAGAAGGGCCTGATC GGGTCGGUCAGGATCUCGT GCCAUGAAGAAGGGCCTGAUC CATCTCCTCATCGAAGAGGCCGCGCTTGTAGGCCACCTCCACGGGCAGCCGGTGGCTCTCCTCAGGGTCGATGATGCCGCCCGTGGCGATCTGGGCCTCCAGCAGGCGGATGCCATGGTCCTTCAG 26 44 4 3 1 84 706.5 674.5 1502.5 765 737.5 2 IAD51407\_124\_primers\_U.txt 1 1 0.75 0.5 0.625 0.166667 0 0 0 44 38 0 0 0 0 44 42 0 1381 32 2

chr3 187449293 187449521 AMPL7155065582 GGAAGAAAGCAAGATGCGGTAATG CAGATGGAGCATGTTGTGGACA GGAAGAAAGCAAGAUGCGGTAAUG CAGAUGGAGCATGTTGUGGACA ATAGGACATACCTGTATAGCCACAGGAGTTAAGTCTGCCTGGGGCACAAGAGTTAAGAAGAGCAGAAGTGTGCAACAAGAGTGGAAATGTGGGTTGCAGCATATCATAGAGGAGTATTTTTTCTGTATGCATGAATTATCAAAGGTTTCTGATCGGGGACTATCTCTTCCATCTCCGACGCTTCCACCCGGGTAGCAACTCACCTGGCCTTAATAAACTTCCGGCAAG 40 34 3 4 1 106 239 248 524 258 266 1 IAD72320\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 44 0 487 9 1

chr19 46282727 46282947 AMPL7155970324 TCTTCAGCATGTCCCACTTGTT GGGCCTTAGAAATTGATGAATGACC TCTTCAGCAUGTCCCACTTGUT GGGCCTUAGAAATTGATGAAUGACC ATGATCTTCATGGCATACACCTGGCCCGTCTGCTTCATCTTCACTACCGCTACCTGAGGTCGAGATAGTGAGACAGAGTGGAGACGGCGGGAAAACAAAAGGGCTCGCCCAGACCCAACTCCACCCGCTTCTGCACCCAGCCGTGGCCCCGCCCCACCTGCCACACCACGCCCATTGGTCCCAAGCCCCGCCTCCAGCCCAGCCCTAGGTTCTAAGGCTC 32 32 5 4 1 137 434 607 1259 611 648 1 IAD46040\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 44 0 0 0 0 44 50 0 1041 173 2

chr17 48165233 48165449 AMPL7153108293 GATCATCCTCCTGCTGTGGAA GCTTGGTGGTGTGGTCAGAAG GATCATCCUCCTGCTGUGGAA GCTTGGUGGTGTGGUCAGAAG GTTAGTAGCCCAGCCCACTCCTGCTCCGGGACCTCCACCAGCACACTCACCAGCCCTTCCTCCAACCCACGTCTCCCCATCCTGGTCCTCCCTTCCATCTCACCCCCACCCTTCCTCCCTGTCCTCTCCACCTTCTACCACCAGCTTACAGTCTCACCCCTGGCCTGGGTTAGTGGGGGGAGCTGCAAGCTGGAAAGGGGGACCCAGGAGCTCTGG 24 24 6 5 1 138 0 27 567.5 288 279.5 2 IAD89479\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 42 0 0 0 0 0 0 0 27 27 0

chr20 48184484 48184700 AMPL7153455490 GATACTGGAGCGGGACTCG GGGAACTTTACCTGGGAGTGG GATACUGGAGCGGGACUCG GGGAACTTUACCTGGGAGUGG gccgggccggccgcgggcTCCGAGACCCTTGGGCTGCAGCCCGGGCGGGAGCCGCCCCCTTTGTCTGGCGGGGCCGAGCGGAGCAGGACACTCACCGCGTGCGGCGGCGGCTCAGTAGCAGCAGCAGCAACAGTGCGGCCAGGAGGCCGAGGAGCGCGGCCCAAGCCATCgcggggctggcggggctggcggggctggcggggctggcggCCTGGC 36 30 3 3 1 172 2 0 22 18 4 1 IAD65862\_182\_primers\_U.txt 1 1 1 1 0.387500125 0.166667 0 0 0 0 0 0 0 0 0 0 0 0 2 2 0

chr8 134726997 134727171 SP\_833.28992 GCATTTCAGTTACTCTGCATTCTGG TGAACAATGTTGGCAATCAAACACC GCATTTCAGTUACTCTGCATTCUGG TGAACAAUGTTGGCAAUCAAACACC ggcccgtcagggcatcatatccttctggttgtaagtgatgctttgactatgggcacatggcctgactcaggccaatcagagAAAATAGGACCCACCACTGTGGAGTTTGTTGGAAACAtagggagtaggcttagagttgtgagcagccatcttgctaccataaggtgaaaacct 32 24 6 3 1 85 0 0 0 0 0 2 WG00042.3.20140613\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr9 107583599 107583825 AMPL7153469552 TTAAGTCCCACTCCTCCCATGAT GGAGCATCTAGAGTTAAGGGTAGGT TTAAGTCCCACUCCTCCCAUGAT GGAGCATCUAGAGTTAAGGGUAGGT GCATGACACACACACATCCAGAAAAGGCCTATTCTTAACGTGCTGCTGGTACTCACATGTCAAACAGCACGTTATGCTGGGGACAGACCCCCAGGTTCTGCCGGATGGTGCTCATCTCAGAGCGAATGTCTTTTCCCAGGATGTAGGCGGTGCCCGAGGTCGGGGGGAACAACCCGGTCAGGATTGACCTGAGGACAAAAATTTAGAAGTACAGAAGTCAGGGTTG 32 32 5 4 1 120 217 273 527 241 286 1 IAD90672\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 490 56 1

chr2 152437261 152437460 AMPL7153255837 TTCAAAGGGCATTAAGTTAAACTCCCT TACATCAGTAATGCTGACTCAGTAGCT TTCAAAGGGCAUTAAGTTAAACUCCCT TACATCAGTAAUGCTGACTCAGUAGCT TATTTCTACTAGTTAGTGTTTGTTCCGGTTGGGAAGGAGGAGCTCTTACGTCACTGGCAATATCCCTGGAAGCCTTGGCATGCTGGATCCCAATGGCATCTGCTCGCAGGTCATAACCAGTCATCTTGACATCTTCCCAAGCTTGCTGATAGCGTTTCTGCAAACAGAGAGTGCAATGCCACAGTCAGTCTGAAGAGGG 32 32 4 6 1 99 0 0 0 0 0 2 IAD95764\_183\_primers\_U.txt 0.333333 0.333333 0.333333 0.333333 0.31249975 0.25 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr1 11186620 11186742 MTOR\_13.38359 GCAAGCAGTAATTTCAGAAGAGGGAA CCAGCCAATCATTCGCATTCAG GCAAGCAGUAATTUCAGAAGAGGGAA CCAGCCAAUCATTCGCATUCAG GGGTCTCAGCCAGTGTAGGAGGGAGAAGTGGGTGACAGAAGTGCACAATGGTCCTTACCCATAAGTGTCAATTTCCGGGGCCTCTGCTTGGATGTGATGACTTGCAAAGACGGTGCTATGGA 36 26 2 3 1 65 217 296 533 223 310 1 WG\_IAD68410.20150216\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 44 0 513 79 1

chr8 144993301 144993507 AMPL1669996028 TGTGTCTCTTCAAATGCCCTTCTT CTACCAGCGCGGCTACTT TGTGTCTCTUCAAATGCCCTTCUT CTACCAGCGCGGCUACUT TCTCCTCCTCAGTGTACACCTGCGTGGTCTCCACCACCTCAGCCTTCTCCGCCCCTTTCAGTGGCAGAAGGCGCAAGCCCGTCTCGGGGTCCTCCACGCACCGCTCCAGCAGCTGCCTGTACGTGAGGTTCTCATGCGTGTTGGGGTCAAAGAAGCCCTTGGTGTCGTCGCTGGGGTCCGCCAGGACGCGGTTCATCTCCTCACTG 36 46 7 3 1 131 11 16 102.5 46 56.5 2 IAD43805\_92\_primers\_U.txt 1 1 0.2 0.2 0.6269230769 0.2 0 0 0 44 48 0 0 0 0 33 36 28 27 5 0

chr15 90631595 90631716 AMPL387631438 CCAAGCCAGCCTCACCTC GCAGTACAAGGCCACAGACTTT CCAAGCCAGCCUCACCUC GCAGUACAAGGCCACAGACTUT CGGTGTTGTACATGCCCATGCCCACGCCGCCTGCGGGGAAGTTGTACACTTCCCACTCCTTGACACCACTGCCATCTTTTGGGGTGAAGACCATTTTGAAAGTGCCGGCCCGGTCTGCCAC 38 46 2 2 1 71 521.5 481 1102.5 599.5 503 2 IAD48187\_93\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 44 0 1002.5 40.5 2

chr5 127645012 127645122 AMPL7153064373 CACATTATATGTGCAGCAGCACAT GGCTTCATTATAAACTACTCGTGGATACAA CACAUTATATGUGCAGCAGCACAT GGCTTCATTAUAAACTACTCGTGGAUACAA CTTTTTGTCACATTGAAAGGCAACTCATTCTCACAAGTGGTTCCATTATAGCTTCGGTAGCAAAAGCTTTTTCTCATGTCTATATAAAGAAAAACAAAGAAACTAGCCAT 38 40 4 7 1 39 0 0 0 0 0 2 IAD55055\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 48 0 0 0 0 0 0 0 0 0 0

chr4 41749234 41749444 AMPL7153691277 ACAGCCACACCAAATCCAGTAT CTCAAAGAGCTGGAAAGGGTCTT ACAGCCACACCAAAUCCAGUAT CTCAAAGAGCUGGAAAGGGTCUT TCTGATCGGCCATGGGGCCCTAGGTCCTTCTCACTCGAGGCTCCAGGACTTCGAATTTCACCAGCCGCCCCTCACCCCACACCTCCCCGGACCAGTGCGGCGGAGCGGGGTCGGTTTCCAGGCGCGCGTACCTGGACTCGCGCCTCTGTGAGGTCGATCTTCAGGGCCAGCTCCTCCCGAGTGTAGATGTCGGGGTAGTGAGTCTCCGCG 42 32 2 4 1 138 0 0 0.5 0 0.5 2 IAD71397\_183\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 46 0 0 0 0

chrX 31676131 31676318 AMPL7152998930 TCATACCTTTTATGAATGCTTCTCCAAGAG GCTGTTTACGAAGTATTTTAAGACACTCCA TCATACCTTTUATGAATGCTTCUCCAAGAG GCTGTTTACGAAGUATTTTAAGACACUCCA CATTGATATTCTCTGTTATCATGTGGACTTTTCTGGTATCATCTGCAGAATAATCCCGGAGAAGTTTCAGGGCCAAGTCATTTGCCACATCTACATTTGTCTGCCACTGGCGGAGGTCTTTGGCCAACTGCTATAGATTTTTATGAGAAAGAGAATGAATGTCAGTTTTTTTTATGAAATCTCTAGT 30 38 6 5 1 74 7.5 16 123 97.5 25.5 2 IAD48111\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 60 0 0 0 0 0 0 0 23.5 8.5 0

chr3 168807862 168808080 AMPL7155275456 GTCATCCTCAGGGTTTCCTTCATG GTTGTTGGGAAGACATAATAAAGGAACAAA GTCATCCUCAGGGTTTCCTTCAUG GTTGTUGGGAAGACATAAUAAAGGAACAAA AAATTACTTGTCACTGGTTCCTTTCCTGTTTTTCCAGTAATATCATTGTCTTCATCCTCCTCATCTAACAACACCTCATCTTCAACTTCTTCATCATCCAGCAAGTCTGAATTTTGACTGGTCACCAAAGCCTTTTCATCTTTAAAATGACTGCCATTCATTCTTTCAAAAGCATTAAAAAAAAAGTCCAATTGTTGGTTTCATTTTTAAAATTGTAA 42 34 6 4 1 72 760 680 1797 934 863 2 IAD83502\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 48 0 0 0 0 0 0 0 1440 80 2

chr3 152020295 152020446 AMPL7156621443 AAAAACATGTTTCTTACGTGTGTGTGT CCTCATAACGCTCCCAAATTTCAGA AAAAACATGTTTCUTACGTGTGTGUGT CCTCATAACGCUCCCAAATTUCAGA TATATTTATAACTGACACATGTGATTCTTTGTACAGTATTTAGAATCCTTCCCTTCAGATAGCAGTCCTCTTGTATTCAGTCTTGTGGCTAAAATAGATCAAAAACATATTTTAAAACTGTTAAAGTAACTGTATGACTCATGCTTGAAGT 32 34 7 4 1 47 0 0 0 0 0 1 IAD46040\_182\_primers\_U.txt 1 1 1 1 1 1 1 54 54 0 0 0 0 0 0 0 0 0 0 0 0

chr3 50405484 50405644 CACNA2D2\_15.77576 CTTAGCTTGTGCCTGCTTATTTCCA TAGAGAGTACTGCAAGGACCTGAAT CTTAGCTTGUGCCTGCTTATTUCCA TAGAGAGTACUGCAAGGACCUGAAT ACCTGCCCGGCCTCTGGGTTCCTCTGGGCTGGCCCCATGCTGCCTGGGCACTGCCCAGAGCCAGCTGCCCTGCCAGGCACTCACACTGCTTGGAGTCTGGAGTCACTTTCTCCATGAGCTCAATAAAGTTTTTCAGGAACTCGGTGTTGTTGTCTGAGGC 32 30 6 3 1 96 273 224 543.5 295.5 248 2 IAD53887\_WG.20140521\_primers\_U.txt 1 1 1 1 1 1 1 50 50 0 0 0 0 0 0 44 50 0 497 49 1

chr3 121206262 121206483 AMPL7154413754 GCACCGCCACTCCTTAATGAAT ACCTGTAAACCCTTGGAAAACTAATAATGT GCACCGCCACUCCTTAAUGAAT ACCTGTAAACCCUTGGAAAACTAATAAUGT TTTGGAAAAGATTTTGGTCACTTGCTACATCAATTATGGACAAACTTTCTGAACTGCTTGAGGCTGGAGTTAACTGTAATCCATCCTGTGATAACTGAAGTGAAAAGCTTGTGTCACTAATAGGGCTGTTGTCTTTGAACCCATTTCTACTCCCTGGACTTAAATCGTGGTTTTTAATATCTGAAGGTGAGCCAAATAAATAACTTTCACCAGGTTGTAAA 36 36 3 6 1 84 647 559 1310 694.5 615.5 2 IAD61011\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 44 0 0 0 0 44 60 0 1206 88 2

chr2 74757265 74757417 AMPL7156123674 CCTGCTGACGTCAGGAACTTC CGGGTTCCAGAGTTCTCTGAG CCTGCTGACGUCAGGAACTUC CGGGTUCCAGAGTTCTCUGAG GACCCCCGGGCCCGAGTGACTTATGGGACCCCCAGTCTCTGGGCCCGGTTGTCTGTTGGGGTCACTGAACCCCGAGCATGCCTGACGTCTGGGACCCCGGGTCCCCGGGCACAACTGACTGCGGTGACCCCAGATACCAGGACCCGGGAGGC 34 34 4 4 1 104 244 247 517 255 262 1 IAD64871\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 42 0 0 0 0 44 42 0 491 3 1

chr3 121168059 121168198 AMPL7154413941 ATTTACCCTTAACAATGCCTGATGAAAAC CAGATGGGCATTAAAGAAAATGATGCT ATTTACCCTUAACAATGCCTGAUGAAAAC CAGATGGGCAUTAAAGAAAATGAUGCT TCTGACTAATTGATATTTCAAAAGAAAATTCCATTACACaaatttttaaaaatataatatGGTAAGATGGTTGAAAAGAATACTATCTAGAAGATAAATTACCTGTGTATCTGGATTTGAAGGAGTCAATATAGCATGC 34 32 5 4 1 37 506 543 1234 593.5 640.5 2 IAD61011\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 54 0 1049 37 2

chr5 118547398 118547617 AMPL7161602863 TGCCTTCGGCATTCTTTAGATATCATT TAACACCAGGATCCTACGGAATATTTCA TGCCTTCGGCAUTCTTTAGATATCAUT TAACACCAGGAUCCTACGGAATATTUCA TACTTCATATTTGTGTCATTAGAGTGGCAATGAAGTGTTCCAAGTACACAACCTTATATTGTAGGTTTTAGTAAATGAAAATCACTACTGACTACccagggtctcagtcactttttccatggatctgctgtatgacctttcacttcttccactcttggagcctcatttactgacatgtaaaattagggctgataattttaaacctgttgcttctctaat 36 36 6 4 1 81 3 12 15 3 12 1 IAD91858\_185\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 15 9 0

chr12 48250894 48251081 AMPL7153195498 CCCGCTCCCTTACTCTATGGAG ATCAGAGATCAGGGCCAAGGTA CCCGCUCCCTTACTCTAUGGAG ATCAGAGAUCAGGGCCAAGGUA ACTGAAGTCCTGCTTACCTGAAGAGGTGATACAGTGATCTGAGCAGGAGGAGGAGGAGTCCCCAGAGAAGCTGGGAGTGTGTCTGGAGTTGGGCCTGGAAGGATGGCTCCCTCCACCATCATTCACACGAACTGGAGGCTGGAAGGGAAAGATGGGGTCTCAGACCCACATTTTGGGGTTGCCTTCC 32 38 5 3 1 105 255 232.5 545.5 294 251.5 2 IAD49670\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 487.5 22.5 1

chr1 160147316 160147459 AMPL7156079245 CAACTCTGTCATTCACAGGGATGAT CTCAGCTCCTACCTTATCCCTTCTA CAACTCTGTCAUTCACAGGGAUGAT CTCAGCTCCUACCTTATCCCTTCUA CAGGCTCTGGCTGGATTCTTTACCTACTTTGTAATCCTGGCTGAGAATGGTTTTAGGCCTGTTGATCTGCTGGGCATCCGCCTCCACTGGGAAGATAAATACTTGAATGACCTGGAGGACAGCTACGGACAGCAGTGGGTGAG 32 38 5 7 1 74 216 287 548 232 316 1 IAD59841\_185\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 50 0 0 0 0 0 0 0 503 71 1

chr18 28602270 28602425 AMPL7160974457 GGGAGGGAAGCTTAATCCTCAG GTGCCACAGACAGAGATGAACC GGGAGGGAAGCUTAATCCUCAG GUGCCACAGACAGAGAUGAACC GAAATGAAATTCTATGGAGTGTGTGAGCTACCTCTCTGTCCAAATAATGAGAGACTGTGGTGATTACGCCTGTGCTGGGATGCACAGAAAAGAGCCCAGGTGACCTTGGTGTCTGCTGCAAAATGCTGTATTTCAGGCGCGTATGCATTGTGTCC 38 44 3 2 1 75 255.5 256.5 583.5 287 296.5 2 IAD89479\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 44 0 512 1 1

chr12 49427206 49427365 AMPL7154632998 GAGCTTGGTTTGTCTGTACTCCA TGGCAACCTTGCTCTTCGAA GAGCTTGGUTTGTCTGTACUCCA TGGCAACCUTGCTCTUCGAA GACCCTGCTGCTGTTGCTGCTGGATTGCCACCTGTCCTAGAAGGtgctgctgctgctgttgctgctgctgctgctgctgcAGTTTCTGGGCCAGCTGCATACGTTGCTGCTGCAGCTGCAGCTGCCTTTCCTGTAAAAGCCTTGAATCAGGTCCGAGGC 28 26 6 3 1 94 528 500 1165 595 570 1 IAD91552\_182\_primers\_U.txt 1 1 1 1 0.2954528915 0.00218818 0 0 0 0 0 0 0 0 0 44 40 0 1028 28 2

chr16 2615508 2615738 AMPL7153299023 CAACGGAGTAAACCTGCTCCAA GTCACTGGCCCTGATCATCAAA CAACGGAGUAAACCTGCUCCAA GTCACUGGCCCTGATCAUCAAA acgaaacaagagaTTTTTACACTTCCTTAACTGCACGATATTCAGATTTCGGCCTTAGTTATGCCAAAAATGGAGAACTACTTAAATATATTCGCAAAATCGGTTCATTCGATGAGACCTGTACCCGATTTTACACGGCTGAGATTGTGTCTGCTTTAGAGTACTTGCACGGCAAGGGCATCATTCACAGGTAACCGCGGGGGTGGCTGGGTGGGTTTGCAGGACGTCAG 26 36 3 5 1 104 0 0 0 0 0 2 IAD50465\_124\_primers\_U.txt 0.5 0.5 0.5 0.5 0.5 0.5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

chr19 1221226 1221381 AMPL7153022536 TCGAAATGAAGCTACAACATCACCA AACCCTACATTTCTGCACAAAAGC TCGAAAUGAAGCTACAACAUCACCA AACCCUACATTTCUGCACAAAAGC GGGTCTGTACCCCTTCGAAGGGGACAACATCTACAAGTTGTTTGAGAACATCGGGAAGGGGAGCTACGCCATCCCGGGCGACTGTGGCCCCCCGCTCTCTGACCTGCTGAAAGGTGGGAGCCTCATCCCTCTGCCCGCAGCCCCAGGGAGGCGGG 34 30 3 3 1 100 2.5 25 283 31 252 2 IAD93167\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 50 0 0 0 0 0 0 0 27.5 22.5 0

chr21 44514701 44514922 AMPL7153089691 GGTGGGTTGGAAGGAGACATTT AGTCTTATTAAAGCGTGGATGGCAA GGTGGGTUGGAAGGAGACATUT AGTCTTATUAAAGCGTGGAUGGCAA CTACCTCGTGTGCACACGGCCCCGAACTGTGCTCAGTCACGTCACTGGCCACTCCTCACTCACCCCATCTCATACTGACGGCAGCAGGCTTCTCTGAAGTCCGTCACGGGTGACAGCTCGGCGTGGATCGGCTGTCCATTAAACCAACGGTTATTCAAGTCAATCACAGCCTTTTCCGCATCTTCCTCACGGCGAAACTGAAAAGACAAAAACAGAAGTGC 36 30 3 5 1 120 597 564 1339 721.5 617.5 2 IAD51194\_124\_primers\_U.txt 1 1 1 1 0.6499999 0.333333 0 0 0 0 0 0 0 0 0 0 0 0 1161 33 2

chr3 178942478 178942587 r234\_1.1345 AATAAAGCAAAGGTACCTAGTAAAGTTTTTAAC TTCCTTACCATCCCCATTTTTAAAGATGAT AATAAAGCAAAGGUACCTAGTAAAGTTTTUAAC TTCCTTACCAUCCCCATTTTTAAAGAUGAT ATTTTAAAGGCTTGAAGAGTGTCGAATTATGTCCTCTGCAAAAAGGCCACTGTGGTTGAATTGGGAGAACCCAGACATCATGTCAGAGTTACTGTTTCAGAACAATGAG 38 40 5 5 1 45 253 233 497 258 239 1 WG\_IAD59162.20140822\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 66 0 0 0 0 44 60 0 486 20 1

chr7 6022547 6022707 AMPL7152999209 GCATGCTGGTCCACTATGAAGAT GCTAGGGACTTTATTTTGTTTTTGTATTGTTTG GCATGCUGGTCCACTAUGAAGAT GCTAGGGACTTTAUTTTGTTTTTGTATTGTTUG TCCTCATTCAGTTTGGTTATTATAAATCCCAGGTTAAACTGACCAATGATTTCCATTTCTGCAAACATCGTTTTACTGCAGGTAGAAAATGTTAATTATCAGACATTTTACAAGATTATTTTTCTGATTATGTTATAGAACACTGTAATAAAAAAAAAGT 28 40 5 7 1 45 185 318.5 517.5 185.5 332 2 IAD49010\_124\_primers\_U.txt 0.5 0.5 0.5 0.5 0.6666666667 0.5 0 0 0 44 46 0 0 0 0 0 0 0 503.5 133.5 1

chr14 64518802 64519011 AMPL7155226305 TGGAGCCATTACACTTAGAAGCAG GCCCTCATAGGTTGTAAGGCTAG TGGAGCCAUTACACTUAGAAGCAG GCCCTCAUAGGTTGTAAGGCUAG AAATCAGATTAAGAAGTGTGACATAAGGAACAAGATGAAAGAGACTATCTTATGGGCCAAGAATTTGTTGGGTGAACTTAATCCCTCCATTCCCCTTCTCCCAGATGACATTCTTTCACAGATCAGAAAGTGCAAAGTGACACATGATGGCATTCTAGCTAGGCAGCAGTCTGTGGAATCGTTGGCTGAAGAGGTCAAAGATAAGGTTC 26 36 2 5 1 88 284 777.5 1466.5 506 960.5 2 IAD62412\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 48 0 0 0 0 44 46 0 1061.5 493.5 2

chr3 178936020 178936127 AMPL7153011349 ATTTTACAGAGTAACAGACTAGCTAGAGACA GAAAAAGAAACAGAGAATCTCCATTTTAGCA ATTTTACAGAGUAACAGACTAGCUAGAGACA GAAAAAGAAACAGAGAAUCTCCATTTUAGCA TGAATTAAGGGAAAATGACAAAGAACAGCTCAAAGCAATTTCTACACGAGATCCTCTCTCTGAAATCACTGAGCAGGAGAAAGATTTTCTATGGAGTCACAGGTAAG 32 44 4 3 1 42 560 515 1156 580 576 1 IAD59467\_182\_primers\_U.txt 0.5 0.5 0.5 0.5 0.6666666667 0.5 0 0 0 44 62 0 0 0 0 0 0 0 1075 45 2

chrX 44935967 44936082 AMPL7153034870 CCAGGAATCTAGGTAAAAATGGCTTATCT GCAAACACTGTTTTATTTCTAGTCAGTCAA CCAGGAATCTAGGUAAAAATGGCTTAUCT GCAAACACTGTTUTATTTCTAGTCAGUCAA ACAGTAGCATTTTGTTGGATAAATGTCCACCTCCAAGACCACCATCTTCACCATACCCTCCCTTGCCAAAGGACAAGTTGAATCCACCTACACCTAGTATTTACGTGAGTCTGAA 40 34 6 6 1 51 260.5 226.5 534 287.5 246.5 2 IAD49510\_124\_primers\_U.txt 1 1 1 1 0.8333333333 0.5 0 0 0 44 58 0 0 0 0 0 0 0 487 34 1

chr19 847634 847841 AMPL7154407813 GGAAGCATTTTATTCTGAAACAGCTGT CCCAGATCACGAAGGAGTCTATTC GGAAGCATTTTAUTCTGAAACAGCUGT CCCAGAUCACGAAGGAGTCTATUC GCTACCCCAGCCCCCTTCCTGGCTGCCTGGGGCCAGCCCGGGTGACTGGCTGTCCCCATCCTCCCGGGAGACTCAGGTGGCCCCTGATGGGTGACTGGCCGTCCCCATCCTCCAGGGAGACTCAGGTGGCCCCTGATGGGTGACTGGCCGTCCCTGTCCTCCAGGGAGACTCAGGTGGCCCCCTGATCTGTGATGGCATCATCCAAG 32 44 4 4 1 141 1 1 346 191 155 1 IAD75017\_236\_primers\_U.txt 1 1 1 1 0.5714284286 0.333333 0 0 0 0 0 0 0 0 0 44 48 0 2 0 0

chr4 106158486 106158603 AMPLP227055656 TGGATACACCTGTCAAGACTCAATATGA CCTTTACAAATTGCTGCCAGACT TGGATACACCTGUCAAGACTCAATAUGA CCTUTACAAATTGCUGCCAGACT TTCCCATCTTGCAGATGTGTAGGTAAGTGCCAGAAATGTACTGAGACACATGGCGTTTATCCAGAATTAGCAAATTTATCTTCAGATATGGGATTTTCCTTCTTTTTTTAAATCTTG 36 26 6 3 1 0 42 1315.5 418 387.5 884.5 2 IAD81960\_236\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 56 0 0 0 0 0 0 0 1357.5 1273.5 2

chr9 135202176 135202389 AMPL7153126155 TAGAAAGACCAGCAATTCGTGAAGT ATTCATGGAAAAGATACAGTTGAGGTTGA TAGAAAGACCAGCAAUTCGUGAAGT ATTCATGGAAAAGAUACAGTTGAGGTUGA CTCTTTGAGCTAAAAATCTTAGTGGTAGGTCTCAAAGGTTTAGATGCAGGAGGAGGCAAGCCAGGTTTACGAAATACATCTTCATCTGCTGCTTTCACTTCAGAGTGTTTTGGGCAGTATTCACCCTGGTTTTTTGTGGTTTCAAGACAATCTTTGTACTTACACTTTGTGCCACTCAAAGATTCCAACTGAGGCCGACTTACAGAATCTTCT 42 36 2 5 1 89 256.5 232 568.5 276.5 292 2 IAD50814\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 50 0 0 0 0 44 56 0 488.5 24.5 1

chr17 59820292 59820511 AMPL7153201518 AAAGCACTATAAAAGCAAAGCGCAA AGCAATTTCTGAGAATTTTGGATATGCTT AAAGCACUAUAAAAGCAAAGCGCAA AGCAATTTCTGAGAAUTTTGGATATGCUT aaaatgagggatccctgCAATTAACTTTATACAAAACCAATGACTCCTGTAATAATAAAACTTAAGGTTTTGATGGCCTACCTGTAGATCTTTCACATTTGGAAAAGGAATTCCTATTGTTATGACAGCACGGGCATTGTCATCTGAGAAATCCAGACCCTCACTCACTTTACCACGACAAACTGCTACCAGGAGAGCTCCATCTTAAACAACAGAAAA 42 40 2 6 1 85 303.5 189.5 554 327.5 226.5 2 IAD80287\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 493 114 1

chr17 56787161 56787249 AMPL7154483836 GCTCTCTTGGAGAGAGAGAGCAT GTCATCTAGGTCATGACGAAATGGAAA GCUCTCTUGGAGAGAGAGAGCAT GTCATCTAGGUCATGACGAAAUGGAAA tttattattattattttatttttCGTAACAAATCTAATATTATCTCTTCTGTATTTAGGTTCGACTAGTGATAGTGGATGGTATTGCT 46 30 3 6 1 22 7 15 23 8 15 1 IAD91552\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 54 0 22 8 0

chr9 108467905 108468043 AMPL7153144977 GCTGCATTGGCATGGAAGAATC TGTTTAAATGTCACATAGGTCACCATACTG GCTGCATUGGCATGGAAGAAUC TGTTTAAATGTCACAUAGGTCACCATACUG TATTTCAAGCTGGTTTACTGCTATGCTCCACTGTTTTGGTGGAGGAATTTTATCCTGTCTACTGCTTGCAGAGCCTCCATTGAAGTTTCTTGCAAACCACACTAACATATTACTGGCATCTTCAATCTGGTAAGCTGC 36 38 4 7 1 59 596.5 512.5 1332.5 698 634.5 2 IAD52935\_125\_primers\_U.txt 0.8333333333 0.5 1 1 1 1 0 0 0 44 44 0 0 0 0 0 0 0 1109 84 2

chrX 85156015 85156090 AMPL7157775317 TATCTTTGGTTTGGCATTTATTTGCATGT CATGTGCTCACGTGTGCAATAC TATCTTTGGTTUGGCATTTATTTGCAUGT CATGTGCUCACGTGTGCAAUAC ACTTGAAGAACAGAATTACACAGGAATGTCAATAAAATTACCTTCGCTTGCTAATGGGTGGAGGGGGCCTTACCT 38 34 6 6 1 32 3.5 0 8 7 1 2 IAD67652\_152\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 44 0 3.5 3.5 0

chr11 119142328 119142509 AMPL7154373806 TACTGGCCAGAAAGAATATTTGAAGAGG GTCTCCCTGAAAGAGTCCACTTG TACUGGCCAGAAAGAATATTUGAAGAGG GTCTCCCUGAAAGAGTCCACTUG TCTTTCTAAATGTATTTTAATATTCATGTTAATTATACATCTTGTATGGTGAATTTGGTGCatttaaaataaaaataattttatGTGTTTAATTATTGCATTCTGATCATTTGTAGGCGAAACCTAACCAAACTGTCCCTCATCTTCAGCCACATGCTGGCAGAACTAAAAGGAATCTTTC 44 38 3 5 1 54 743 756 1579 771 808 1 IAD59467\_182\_primers\_U.txt 1 1 1 1 0.8333333333 0.5 0 0 0 0 0 0 0 0 0 44 46 0 1499 13 2

chr3 168861441 168861655 AMPL7153198988 TGTTATTTTTATTCTTCAGGCTCCAGTGAT CAACTGATTATTTTAATGAGTGGGCCAAT TGTTATTTTTATTCTUCAGGCTCCAGUGAT CAACTGATUATTTTAATGAGUGGGCCAAT CTTTTGTGCTCTCAAGGAAAGACAAGAAAATCTTTACAACATACCTGATCATTTATCTGGCATGCAACAAGGTTGTGCTGATCATAACAGCCAGCGAATCTAATGTACTTGAGCCAGCTTCCAACATCTGGTTGACTGGCATCTATGCAGAACTTCACATTGTAAAATTCGTCTAAGATCTGGAGGGAAGAAGATGAGAACAATCAATTGCCAT 34 26 6 5 1 86 983 894.5 1999 1049 950 2 IAD83502\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 1877.5 88.5 2

chr14 75516045 75516270 AMPL7156620771 TCTTGGACGAAATTTCCACAGCA GGCCAATGTGTTGAGGAACTTG TCTUGGACGAAATTUCCACAGCA GGCCAATGUGTTGAGGAACTUG TGGCCATGTCAGCAATATTTGCCAAGGCCTCTCCTCGGAAACCATAAAACCTTGGATTCTCCAAGTCCTGTACCGAGTGGCATTTACTGGTGAAATAACGATTTCCCACTTTCTCTACATCATCACTCCCCATCCCAAATCCATTGTCTATCACTTGAACTTGGAAGGTTTCCATATTCACCCTGACAGCCACACATTTTGCTTCAGCATCAATACTGTTGAGGG 28 32 2 4 1 102 0 0 0 0 0 1 IAD46040\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 46 0 0 0 0 44 44 0 0 0 0

chr15 66727350 66727472 SP\_34.42606 TGGTGACAGTATTGACTTGTGCTC CTGATCTTCTCAAAGTCGTCATCCTTC TGGTGACAGTAUTGACTTGTGCUC CTGATCTTCTCAAAGUCGTCATCCTUC CCACTTTGGAACAGGACCAACTTGGAGGCCTTGCAGAAGAAGCTGGAGGAGCTAGAGCTTGATGAGCAGCAGCGAAAGCGCCTTGAGGCCTTTCTTACCCAGAAGCAGAAGGTGGGAGAACT 32 42 6 8 1 67 537 516 1156.5 567.5 589 2 OCP50\_CF\_175.10.20150128\_primers\_U.txt 1 1 0.5 0.5 0.75 0.5 0 0 0 0 0 0 0 0 0 44 54 0 1053 21 2

chr14 64644095 64644206 AMPL7153105337 TAGACCTGGGACCAGTGTGAAA GATTATCTTGGCCACTTGTTTGGATTTC TAGACCUGGGACCAGTGUGAAA GATTATCTTGGCCACUTGTTTGGATTUC GAAAATCAAGGAGTTGAAAAGCAGGCTGCAAGTTTTAAAGGCACAAAGTGAAGATCCTCTTCCAGAGCTTCACGAGGACCTCCATAACGAAAAAGAGCTGATTAAGGTATT 34 44 3 6 1 46 704.5 584.5 1472.5 759 713.5 2 IAD51407\_124\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 44 0 0 0 0 0 0 0 1289 120 2

chr9 94123739 94123956 AMPL7154769328 GGTTATTAAAAGCAAGAAATAGGTGCACA GGGCTACAGCTCTGAGATGAA GGTTATUAAAAGCAAGAAATAGGUGCACA GGGCTACAGCUCTGAGAUGAA GGAAGCGGCCACGCTGGGTGAGTAGGGAGGTGAGAAAGGGGAGGGACCCAGGTTCGGTGCGCCTGCCTGACCTCGACCCCGCGTCCTGCCGGCGGACGCTGCACCTTATGCCCGTCCTGAGAGCGAGCGGCCGCCCGCTGCCCCGCGCCTGCCCAGCGTTCGCACCTCACCTCGGTTCTCCTCCTCCAGGTGCCGCACCCGCAGCTCGTCCTCCGTC 42 34 4 4 1 156 0 2 579 277.5 301.5 2 IAD59025\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 2 2 0

chr2 179443284 179443498 AMPL7153034283 ACATGTTCAACTGTTCTCAGGGAA GTGTCTTAAATTCAGAAGACGTAAAGCAAA ACATGTUCAACTGTTCUCAGGGAA GTGTCTTAAATUCAGAAGACGUAAAGCAAA TATTTGTGAGGAATCTTGATGTAAAAGCTGTAGGATAAGAACAAACAAAATACCTGTAATTGGAGAACCACCAGTTTTCTTGGGGTCAGTCCAAGTTAGAGATACTGAATCGTGTCTGACATCCACAATATTGGGAGGTGGGGGAGCATCAGGCACATCTAGAAAAAAGTAGATAATGCAAGATTTATAATAAGAAGCCTCCTCAAAACCGTGT 26 28 5 5 1 84 0 0 1 0 1 1 IAD62779\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 52 0 0 0 0

chr8 48809696 48809879 AMPL1777491509 GGGATAATAAAGCACCGTGGTGA GTTGCATGTTGGAGAGGGACTA GGGATAAUAAAGCACCGTGGUGA GTTGCATGTUGGAGAGGGACUA TTAAAGATATACAGATTACCATACCTGGCAATAAAGGAACGAATTTATAAAAGAGTTCAATGGATTTGTGTCGACATTCTGTCTGGGGCCTCCCACAATGAGCTAAAAGCCACTTGACCAGATCCAATAAACACAATGATGCGGAAGGTGGAAATCCTCTGCACAGAGACAGCATACTGTCAT 38 34 4 4 1 75 259 251 699 347.5 351.5 2 IAD47675\_93\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 510 8 1

chr11 76919703 76919886 AMPLP657245562 GACGTGAGCACTCCTCTGT GGCCAAAGTACAGCAACGCTA GACGUGAGCACTCCTCUGT GGCCAAAGUACAGCAACGCUA CAGGGACCCTCTGGGTGACCGACTGCCCTGTGCTGCAGGAATTGTGCCCTCACTCACCTACCAGGTGTTCTTCATGAAGAAGCTGTGGACCACCACGGTGCCAGGGAAGGATCCCATGGCCGATTCCATCTTCCACTATTACCAGGTGGGCACCTCTGCACTCTAGTTGCCTTCGTGCACAGC 36 32 4 2 1 0 814.5 287.5 120 814.5 423.5 2 IAD78091\_236\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 1102 527 2

chr11 119149210 119149431 AMPL7153074300 TTCAGATGCATCTGTTACTATCTTTTGCT GATTTTGCCAGTCTCCTAAACTGC TTCAGATGCATCUGTTACTATCTTTUGCT GATTTTGCCAGUCTCCTAAACUGC CTTCTGCAGGAATCAGAAGGTCAGGGCTGTCCTTTCTGCCGATGTGAAATTAAAGGTACTGAACCCATCGTGGTAGATCCGTTTGATCCTAGAGGGAGTGGCAGCCTGTTGAGGCAAGGAGCAGAGGGAGCTCCCTCCCCAAATTATGATGATGATGATGATGAACGAGCTGATGATACTCTCTTCATGATGAAGGAATTGGCTGGTGCCAAGGTAAGATG 34 32 8 5 1 108 492 538 1087 514 573 1 WG\_IAD51624.20140321\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 1030 46 2

chr1 155205421 155205647 AMPL7153133967 TGTAGAGTGATGTAAGCCATCCGAT CGCCTTTGTCTCTTTGCCTTTG TGTAGAGTGAUGTAAGCCAUCCGAT CGCCTTTGUCTCTTTGCCTTUG TAGGAGATGATAGGCCTGGTATGGAATGGGGGTGCCCGCCCTCCACTCACCTGAAGTGGCCAAGGTGGTAGAACATGGGCTGTTTGTAAAACGTGTCCTTGGTGATGTCTACAATGATGGGACTGTCGACAAAGTTACGCACCCAATTGGGTCCTCCTTCGGGGTTCAGGGCAAGGTTCCAGTCGGTCCAGCCGACCACATGGTACAGGAGGTTCTAGGGTAAGGA 28 32 5 5 1 124 269 231 528 278 250 1 IAD85518\_182\_primers\_U.txt 0.5 0.5 0.5 0.5 0.625 0.5 0 0 0 0 0 0 0 0 0 0 0 0 500 38 1

chr11 32410546 32410751 AMPL7153001836 GGAGGAGTGGAGAGTCAGACTT GCCTGTCTCTTTGTTGCAAGTG GGAGGAGUGGAGAGTCAGACUT GCCTGTCTCUTTGTTGCAAGUG AAAGCAGTTCACACACTGTGCTGCCTGGGACACTGAACGGTCCCCGAGGGAGACCCCTCAAAGCGCCAGCTGGAGTTTGGTCATGTTTCTCTGATGCATGTTGTGATGGCGGACTAATTCATCTGACCGGGCAAACTTTTTCTGACAACTTGGCCACCGACAGCTGAAGGGCTTTTCACCTGTTGACACAATTGCCAGTCAGAGA 38 30 3 6 1 108 460.5 38.5 1019.5 509.5 510 2 IAD59467\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 499 422 1

chr4 106182821 106183023 TET2\_6.20819 ATAAAGGCACCATATATTGTGTTTGGGA CAAGTAAGTTGTTACAATTGCTGCCA ATAAAGGCACCAUATATTGTGTTUGGGA CAAGTAAGTUGTTACAATTGCUGCCA TCAAAATGTAAGGGGAATAATCTAACTGATAGTCTCTTTTACATAGAGAAAATGGACTTAGAATTTAATATGTAGAATTATTCACTTTATACAGGAAGAGAAACTGGAGTCTCATTTGCAAAACCTGTCCACTCTTATGGCACCAACATATAAGAAACTTGCACCTGATGCATATAATAATCAGGTAAGTTTAAATAATCAT 34 30 6 5 1 63 714.5 539 1398 758 640 2 IAD76897.07202015\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 1253.5 175.5 2

chr6 152576042 152576229 AMPL7153340466 ACCTGGAAATTTAGTATTTGCTGAAGTCT AACACTGAAAAATGCCCTTTTATCACC ACCTGGAAATTUAGTATTTGCTGAAGUCT AACACTGAAAAAUGCCCTTTTAUCACC TCTTTCATCTGATGACATCGTTGATTCACTACTGAGTCTAGCAAGGATAACCTGCCCAAAAGACAACCCAAAGTATCTTCAATAACATCTCGATTATCACCATTCTCTGGAAAAGCTTGGGAAAACAAGTTTTTGTTCTTATCCATTTCTTCAGACATTTCCTTAATGTCTTTGGCAAGAATCTAGA 38 30 6 4 1 69 492.5 573 1152.5 535 617.5 2 IAD62412\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 58 0 0 0 0 0 0 0 1065.5 80.5 2

chr2 179318179 179318353 AMPLP808146745 AGAGCTTTGTCAAGCAAGTTGGA TGAGTTGGCACTCCCAAACATTTAA AGAGCTTTGUCAAGCAAGTUGGA TGAGTTGGCACUCCCAAACATTUAA ATGGAGGGAGATTAGTTCCTGTTCCAAGCCTCAGTGAAGCTGACAAATATCAACCTCTAAGTCTGGTGGTAAAAAAGAAGCGATGCTTTCTGTTTCCTAGATATAAATTTACTTCAACACCTTTTACACTGAAAGATATTCTCCTAGGAGACAGAGAAATTTCAGCTGGTAAGT 26 34 3 3 1 0 881 226 218 496 250.5 2 IAD78091\_236\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 46 0 0 0 0 0 0 0 1107 655 2

chr19 3586766 3586878 AMPLP805432785 GTGGGTTCTGCGGATTGGA CCACAATGGAGTGGTCGTTGA GTGGGTUCTGCGGATUGGA CCACAATGGAGUGGTCGTUGA GCGGGTGGCTGGGGTTGCCCTGCCAGCGACGCTGGATCCCTGCAGAGAATCAAGGAAGGCAGTATCATCAACCGGATCGAGGCAGTGTGCGTGGGTGACAGCATCGAAGCCA 26 34 4 4 1 0 950.5 238.5 176.5 449.5 248.5 2 IAD78091\_236\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 40 0 1189 712 2

chr2 84955012 84955232 AMPL7156334212 AATGGAATTTCTTTCTCCGAGGTTCT AAGTGAGAATGAAAACGAAGTGAAAAGG AATGGAATTTCTUTCTCCGAGGTUCT AAGTGAGAAUGAAAACGAAGUGAAAAGG CAGGATTGGAAAAGGTACCTGATTCCCATTTAGGTGATGATtgatatggtttggctgtgtccccacccaaatctcattttgaattgtagctaccataattcccatgtgctgtaggatggacctggtgggagattactgaatcacgggggcagtttcccccatactgttctcgtggtagtgaataagtctcatgagacctgatggttttataaggggaaac 32 28 5 3 1 100 514 566 1151 561 590 1 IAD60799\_182\_primers\_U.txt 1 1 0.1339960823 0.00446429 0.1140914173 7.9233e-05 0 0 0 44 52 0 0 0 0 0 0 0 1080 52 2

chr19 50760527 50760647 AMPLP861975321 CTAAAACTGACCCTGACCTCCTT TCAGGGACTCCTTGTAGAGCTG CTAAAACTGACCCUGACCTCCUT TCAGGGACUCCTTGTAGAGCUG TCTCTCTCTCTGCATCTCCATCTGACAGTGGAGGGCATCGTGGGGCTGGAACAGGTGAGCAGCCTGGGCGACGGCCCACCAGGTGGCCGCCCCCGTCGGGGTATGTTCCGGACAGTGGGA 38 34 5 4 1 0 1006 233 238 509.5 264 2 IAD78091\_236\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 44 42 0 1239 773 2

chr21 47986493 47986712 AMPL7157161052 GCGGCACGATGCACTGTAT AGACCAGGGTGACAATGCAG GCGGCACGAUGCACTGUAT AGACCAGGGUGACAAUGCAG TGGTTGGGTCTCTGGATGAAACTCTGGAGCTCAGAGGCATGCGGTACCACCCCATCGACATTGAGACCTCTGTCATCCGAGCACACAGGAGCATCGCTGAGTGGTAAGAGCCCAGGTGGAGGGCGGCTTCACGTGGTCCCTCCAGCCCTTCCTCTGGGCATGAGTGCTGTGCATCGGTTGGAGCAGAGCAAGGACTGCTGGGCCCTGGGCACAGGCCTC 32 30 3 2 1 135 548 585 1243 593 650 1 IAD81246\_182\_primers\_U.txt 1 1 1 1 0.9285714286 0.5 0 0 0 44 38 0 0 0 0 0 0 0 1133 37 2

chr14 65234460 65234621 AMPL7154514806 CAAAAGCCTCATGCCTCTTGATG AGTGAACGATTGGGTGCTAACAG CAAAAGCCTCAUGCCTCTTGAUG AGTGAACGAUTGGGTGCUAACAG GCTTCTCCACACTGTCCACTGTGTGTCCAAAGTCCCCGCTGGCCAGGTAGGGCTCCTGGGCAATCAGCCACGCCTCAGCCACAGAGGCATCCCTCGAGAACTGGCACACCTCCAGCACTGCCAGGGGGAACAGGACACAGACCCCCCACAAGGCCCAGGGC 32 26 5 4 1 104 233 253 507 244 263 1 IAD62629\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 44 46 0 0 0 0 0 0 0 486 20 1

chr10 43623528 43623750 AMPL7152999598 CTGCACTTGAAGTTTTGGTTCTTCA CTTTCCATTCTCAGCATGTTTCTTCC CTGCACTTGAAGUTTTGGTTCTUCA CTTTCCATTCUCAGCATGTTTCTUCC TGCAGAACAAATGATCTGTTTTCATTTTTAGGCATGTCAGACCCGAACTGGCCTGGAGAGAGTCCTGTACCACTCACGAGAGCTGATGGCACTAACACTGGGTTTCCAAGATATCCAAATGATAGTGTATATGCTAACTGGATGCTTTCACCCTCAGCGGCAAAATTAATGGACACGTTTGATAGTTAACATTTCTTTGTGAAAGGTAATGGACTCACAAGG 36 34 5 6 1 96 1.5 4.5 16.5 9 7.5 2 IAD86095\_188\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 6 3 0

chr17 48646478 48646688 AMPL7153470333 ACTAGGGTGGGACTAGAGGGTA GGAAGGGACCGATCTGATCCAT ACTAGGGUGGGACTAGAGGGUA GGAAGGGACCGAUCTGAUCCAT TCCCTCACCCACGTCTCAGTTTCAGCCACCTCTTGTCCCCACATCAGGCCTTTGATGACTTCATCTTTGCCTTCTTTGCCGTGGAGATGGTGGTGAAGATGGTGGCCTTGGGCATCTTTGGGAAAAAGTGTTACCTGGGAGACACTTGGAACCGGCTTGACTTTTTCATCGTCATCGCAGGGTGAGGACCTGGGCTGGGGTGGGAGAGCA 40 40 4 3 1 114 212 278 535 240 295 1 IAD73145\_182\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 490 66 1

chr2 48033279 48033395 AMPL7156926015 TGTTGCTTTTCTGTCCTAGCATTTTTG TGTACGACATTTTATAGTCTCAGCAAGTTC TGTTGCTTTTCUGTCCTAGCATTTTUG TGTACGACATTTTAUAGTCTCAGCAAGTUC TTTAATTCCTTTTTTGTTTTAATTCCTTTGAGTTACTTCCTTATGCATATTTTACTTTAACAGGAAGAGGTACTGCAACATTTGATGGGACGGCAATAGCAAATGCAGTTGTTAAA 36 38 6 6 1 37 239 249.5 523.5 246 277.5 2 WG\_IAD92952.20160315\_primers\_U.txt 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 488.5 10.5 1