

Supplementary Table S3. PCR primer sequences

Sequence Name	Sequence
Forward primers	
NM_001163941_cds_1_0_chr7_20629434_f.fwd	TGTA AACGACGGCCAGTGATGCTTCCTTTTCAA ACTGTG
NM_001163941_cds_2_0_chr7_20632705_f.fwd	TGTA AACGACGGCCAGTCAAGTTTACAGACA ACCAGTGACAA
NM_001163941_cds_3_0_chr7_20634836_f_1.fwd	TGTA AACGACGGCCAGTTGATTTTATGC ACTTATTTACCATC
NM_001163941_cds_4_0_chr7_20638207_f.fwd	TGTA AACGACGGCCAGTCTGCGTGTGGGCAGTAAAT
NM_001163941_cds_5_0_chr7_20649332_f_1.fwd	TGTA AACGACGGCCAGTCACTCTATGTTTACAGGAAACCT
NM_001163941_cds_6_0_chr7_20649609_f_1.fwd	TGTA AACGACGGCCAGTTGTTGCTGCCTTGATTTTTG
NM_001163941_cds_6_0_chr7_20649609_f_2.fwd	TGTA AACGACGGCCAGTTCAGTGATGGTATTGGAGATAAGA
NM_001163941_cds_7_0_chr7_20651904_f_1.fwd	TGTA AACGACGGCCAGTAGGTA AACCTGTCTAGTACCAA
NM_001163941_cds_8_0_chr7_20652109_f_1.fwd	TGTA AACGACGGCCAGTGGTCATCTCATTGACCAGTAAGG
NM_001163941_cds_8_0_chr7_20652109_f_2.fwd	TGTA AACGACGGCCAGTTGTCTCTTGGTGCTGTGTACTTC
NM_001163941_cds_9_0_chr7_20653683_f_1.fwd	TGTA AACGACGGCCAGTGGTCATATCTCCATTCTTCTTACC
NM_001163941_cds_10_0_chr7_20654116_f_1.fwd	TGTA AACGACGGCCAGTAAGAGGAGATTGTGTTGTATTGAAA
NM_001163941_cds_11_0_chr7_20656170_f_1.fwd	TGTA AACGACGGCCAGTTGTACATGAAACAAACATAACAAGA
NM_001163941_cds_12_0_chr7_20657568_f_1.fwd	TGTA AACGACGGCCAGTGGTGCCCATCTACCAGAAAA
NM_001163941_cds_12_0_chr7_20657568_f_2.fwd	TGTA AACGACGGCCAGTCCATTTGGAGTGGTTAGTCAAGA
NM_001163941_cds_13_0_chr7_20664654_f_1.fwd	TGTA AACGACGGCCAGTAGCACCCAGAGGCTGAAGTA
NM_001163941_cds_14_0_chr7_20687653_f_1.fwd	TGTA AACGACGGCCAGTTTTCTTAAACAGTGCAAAGGTTGT
NM_001163941_cds_15_0_chr7_20691844_f_1.fwd	TGTA AACGACGGCCAGTGAAGCTGTTTACAGCAAGACTACA
NM_001163941_cds_16_0_chr7_20704555_f_1.fwd	TGTA AACGACGGCCAGTACAATAGTCACTTGTGGCAA
NM_001163941_cds_17_0_chr7_20705973_f_1.fwd	TGTA AACGACGGCCAGTAAATTTTCACTTTTTCTGTTTCTTT
NM_001163941_cds_18_0_chr7_20706206_f.fwd	TGTA AACGACGGCCAGTTGATATTCGTCA TTTTGGGTGT
NM_001163941_cds_19_0_chr7_20710872_f.fwd	TGTA AACGACGGCCAGTGGTGATGAGTAATGAGTCCAAGC
NM_001163941_cds_20_0_chr7_20729164_f_1.fwd	TGTA AACGACGGCCAGTCTCAAAGTATAAATTC AAGGCATAAA
NM_001163941_cds_20_0_chr7_20729164_f_2.fwd	TGTA AACGACGGCCAGTCAAATGCAACTAACATGGGACT
NM_001163941_cds_21_0_chr7_20733188_f_1.fwd	TGTA AACGACGGCCAGTGTGAGTGAGTGAATTCACAATGG
NM_001163941_cds_22_0_chr7_20734463_f_1.fwd	TGTA AACGACGGCCAGTGACCTTGTCTATAATTCAGCTCA
NM_001163941_cds_23_0_chr7_20745131_f_1.fwd	TGTA AACGACGGCCAGTTGGTGGGTCTTACGCGTTAG
NM_001163941_cds_23_0_chr7_20745131_f_2.fwd	TGTA AACGACGGCCAGTCTCGTTTTGGTCTCTGAAT
NM_001163941_cds_24_0_chr7_20749025_f_1.fwd	TGTA AACGACGGCCAGTAACAAAAGTGACAGAAACCCACT
NM_001163941_cds_24_0_chr7_20749025_f_2.fwd	TGTA AACGACGGCCAGTCAACCTTCCCAAGTCATTCTTC
NM_001163941_cds_25_0_chr7_20751380_f_1.fwd	TGTA AACGACGGCCAGTTGAGCCTTCTTGGGTA ACT
NM_001163941_cds_25_0_chr7_20751380_f_2.fwd	TGTA AACGACGGCCAGTAGCCTGTGCTCTTCAACTG
NM_001163941_cds_26_0_chr7_20759508_f_1.fwd	TGTA AACGACGGCCAGTTGCAACAAAGCCCAAGAATA
NM_001163941_cds_27_0_chr7_20761575_f_1.fwd	TGTA AACGACGGCCAGTGCAGTTCTTTGGGGACAAG
NM_001163941_cds_27_0_chr7_20761575_f_2.fwd	TGTA AACGACGGCCAGTTGGTCACTCACAGGCTCTCT
NM_001089_cds_0_0_chr16_2266676_r_1.fwd	TGTA AACGACGGCCAGTCCAGTCTCGGAAAGTGAAAC
NM_001089_cds_1_0_chr16_2267599_r.fwd	TGTA AACGACGGCCAGTCCCAACACAGCAAGTATCA
NM_001089_cds_2_0_chr16_2267881_r_1.fwd	TGTA AACGACGGCCAGTATGCCTTGGTGCTCATCTT
NM_001089_cds_2_0_chr16_2267881_r_2.fwd	TGTA AACGACGGCCAGTCAAGTGGGAGAGGCCTAGGTA
NM_001089_cds_3_0_chr16_2268290_r_1.fwd	TGTA AACGACGGCCAGTTCACACTCTCCATGCTGTG
NM_001089_cds_3_0_chr16_2268290_r_2.fwd	TGTA AACGACGGCCAGTACCCGGTGTGAAACTTCC
NM_001089_cds_4_0_chr16_2268945_r_1.fwd	TGTA AACGACGGCCAGTGGGCAGTCCCTTCTCTACC
NM_001089_cds_5_0_chr16_2271029_r_1.fwd	TGTA AACGACGGCCAGTCAATACCTTGTCTCGCTGTCC
NM_001089_cds_5_0_chr16_2271029_r_2.fwd	TGTA AACGACGGCCAGTCAACCCACCTTCCGACAT
NM_001089_cds_6_0_chr16_2271383_r_1.fwd	TGTA AACGACGGCCAGTAGGCACCCAACAGAAAACAC
NM_001089_cds_7_0_chr16_2273188_r_1.fwd	TGTA AACGACGGCCAGTGAGACCATCTGGTGACAGGA
NM_001089_cds_8_0_chr16_2274281_r_1.fwd	TGTA AACGACGGCCAGTTGTGGTTCCTTGTACAGATGC
NM_001089_cds_8_0_chr16_2274281_r_2.fwd	TGTA AACGACGGCCAGTGGGACTCACTATATTTCTGCACTA
NM_001089_cds_9_0_chr16_2274781_r_1.fwd	TGTA AACGACGGCCAGTCTCTGCACAGGGCAAGGAC
NM_001089_cds_9_0_chr16_2274781_r_2.fwd	TGTA AACGACGGCCAGTGAAGATGGTCAAGCCTCGTGTA
NM_001089_cds_10_0_chr16_2275444_r_2.fwd	TGTA AACGACGGCCAGTAGCTGGTCCGGTTCTGTC
NM_001089_cds_11_0_chr16_2276696_r_1.fwd	TGTA AACGACGGCCAGTGTGGATGGTGGAGGAGGAT
NM_001089_cds_11_0_chr16_2276696_r_2.fwd	TGTA AACGACGGCCAGTGCAGCTTGACAGAAAGTTGT
NM_001089_cds_12_0_chr16_2278028_r_1.fwd	TGTA AACGACGGCCAGTCCAGGCATGTTTGATGGT
NM_001089_cds_12_0_chr16_2278028_r_3.fwd	TGTA AACGACGGCCAGTGTACTCGCCCAAGGTCAGC
NM_001089_cds_13_0_chr16_2279436_r_2.fwd	TGTA AACGACGGCCAGTCTCTGCATGGGCTTACATGA
NM_001089_cds_14_0_chr16_2282142_r_1.fwd	TGTA AACGACGGCCAGTGCATTTACTGACCGAAGGAAGAC

(continued)

Supplementary Table S3. Continued

Sequence Name	Sequence
NM_001089_cds_15_0_chr16_2285592_r_1.fwd	TGTA AACGACGGCCAGTACCCAGCCAAGCAGATTTCAT
NM_001089_cds_16_0_chr16_2287331_r_1.fwd	TGTA AACGACGGCCAGTGGCTGAACCCATCCTAACC
NM_001089_cds_16_0_chr16_2287331_r_2.fwd	TGTA AACGACGGCCAGTACCCGCTCACCGTATTCTG
NM_001089_cds_17_0_chr16_2287768_r_1.fwd	TGTA AACGACGGCCAGTGGCTTGAGTCCCTCAAGGAT
NM_001089_cds_18_0_chr16_2288388_r_1.fwd	TGTA AACGACGGCCAGTCCCTTGACGTAGCTGGACTCA
NM_001089_cds_19_0_chr16_2289405_r_1.fwd	TGTA AACGACGGCCAGTGGCTGAGATGGTGTAAAG
NM_001089_cds_20_0_chr16_2290007_r_1.fwd	TGTA AACGACGGCCAGTAGGAGGGAGCAAGGCTCAG
NM_001089_cds_21_0_chr16_2293971_r_1.fwd	TGTA AACGACGGCCAGTGTCTGAAGCGGAAGGATTA
NM_001089_cds_21_0_chr16_2293971_r_2.fwd	TGTA AACGACGGCCAGTAGAGCAGGGCATCAGAACTC
NM_001089_cds_22_0_chr16_2298452_r_1.fwd	TGTA AACGACGGCCAGTAGCTATCCAGCCCACACTCA
NM_001089_cds_23_0_chr16_2307285_r_1.fwd	TGTA AACGACGGCCAGTAGTCCAACCTTCCCCTGGT
NM_001089_cds_24_0_chr16_2307650_r_1.fwd	TGTA AACGACGGCCAGTGGACATTGACAGTCTCCTCTCC
NM_001089_cds_25_0_chr16_2309583_r_1.fwd	TGTA AACGACGGCCAGTACTAAAACCAAGCCTTTGGA
NM_001089_cds_26_0_chr16_2313525_r_1.fwd	TGTA AACGACGGCCAGTACCAAGCCAATGTCTTGAA
NM_001089_cds_28_0_chr16_2316012_r_12.fwd	TGTA AACGACGGCCAGTAGGTTAAGCGAAAGCAGTG
NM_001089_cds_28_0_chr16_2316012_r_20.fwd	TGTA AACGACGGCCAGTCCAAGGAGAGACTGCTATTACTC
NM_001089_cds_28_0_chr16_2316012_r_21.fwd	TGTA AACGACGGCCAGTGTCTCACCTCGCATGTT
NM_001089_cds_29_0_chr16_2316415_r.fwd	TGTA AACGACGGCCAGTGGGCACATTTCCGACTG
Reverse primers	
NM_001163941_cds_1_0_chr7_20629434_f.rev	ACGATGAGAAATTCAGAAGAGGA
NM_001163941_cds_2_0_chr7_20632705_f.rev	GGATGTTATGCTATTTTCCCTATC
NM_001163941_cds_3_0_chr7_20634836_f_1.rev	GCCCAGCAATATGGCAGAA
NM_001163941_cds_4_0_chr7_20638207_f.rev	CTCTGTCAACTACAACCTCAAAGCATA
NM_001163941_cds_5_0_chr7_20649332_f_1.rev	CAAAGCTAACGTACTACAATATCATCC
NM_001163941_cds_6_0_chr7_20649609_f_1.rev	TGCATTAGCCATCTCATCTACC
NM_001163941_cds_6_0_chr7_20649609_f_2.rev	AAGGACATCATCTATTCCATGC
NM_001163941_cds_7_0_chr7_20651904_f_1.rev	CCTTTGCATCTTTGAGATTCTG
NM_001163941_cds_8_0_chr7_20652109_f_1.rev	GAATTTTGGCTAAACTAGGTAAGGA
NM_001163941_cds_8_0_chr7_20652109_f_2.rev	CAAAAGCGGAATGCAGATG
NM_001163941_cds_9_0_chr7_20653683_f_1.rev	TTTCAATACAACACAATCTCCTCTT
NM_001163941_cds_10_0_chr7_20654116_f_1.rev	AGTTGATCCAGAGTATTGTCCA
NM_001163941_cds_11_0_chr7_20656170_f_1.rev	TATGGCTTCTCTCCAGCTC
NM_001163941_cds_12_0_chr7_20657568_f_1.rev	TGCCACCATAAGCTAAGGACA
NM_001163941_cds_12_0_chr7_20657568_f_2.rev	GCCACATTGAAAGAAGAATTGTC
NM_001163941_cds_13_0_chr7_20664654_f_1.rev	CCATCACGTAAGTTCTCAGTGG
NM_001163941_cds_14_0_chr7_20687653_f_1.rev	TTGAAACACTCCATTTCTTACTGA
NM_001163941_cds_15_0_chr7_20691844_f_1.rev	TGACACACTGATCTAGAGTGAAA
NM_001163941_cds_16_0_chr7_20704555_f_1.rev	TCCCCTTGTGGTTTAGACTGA
NM_001163941_cds_17_0_chr7_20705973_f_1.rev	CTGACCTGATATAACATGGCTTTG
NM_001163941_cds_18_0_chr7_20706206_f.rev	GTCACACTTTTGGACTTGCTTCT
NM_001163941_cds_19_0_chr7_20710872_f.rev	ATGTGGGTCATCTCAGCACA
NM_001163941_cds_20_0_chr7_20729164_f_1.rev	CGATGGTGATAACAGTCTTCATT
NM_001163941_cds_20_0_chr7_20729164_f_2.rev	TCTACCTTCTATCCTAAATTGGTCTGT
NM_001163941_cds_21_0_chr7_20733188_f_2.rev	TTTCAGGAAAATAAGAAAATGTGC
NM_001163941_cds_22_0_chr7_20734463_f_1.rev	TCCATTTCTGGGTTCAATC
NM_001163941_cds_23_0_chr7_20745131_f_1.rev	AGTGGCCCCCAGTCTACT
NM_001163941_cds_23_0_chr7_20745131_f_2.rev	TGACATTATCTTTGACAGTITTC
NM_001163941_cds_24_0_chr7_20749025_f_1.rev	AGGACTGCTAACCCCCAGAT
NM_001163941_cds_24_0_chr7_20749025_f_2.rev	TTGTGCTTCACTTCAGAGTCTC
NM_001163941_cds_25_0_chr7_20751380_f_1.rev	CTTAGCCTTACTTGGCAGCTTTA
NM_001163941_cds_25_0_chr7_20751380_f_2.rev	GGTCGTAGGAAAATCGTCACA
NM_001163941_cds_26_0_chr7_20759508_f_1.rev	AGCCTTAATTGGAACGGTGA
NM_001163941_cds_27_0_chr7_20761575_f_1.rev	CCTTCTTTGCATTACACGAACA
NM_001163941_cds_27_0_chr7_20761575_f_2.rev	GCAGAAGTTGATGGGAAATAAA
NM_001089_cds_0_0_chr16_2266676_r_1.rev	GCCAGAGGACTCCCAGGT
NM_001089_cds_1_0_chr16_2267599_r.rev	CTGTGCGGAGCGTCTGTG
NM_001089_cds_2_0_chr16_2267881_r_1.rev	CACAGCATGGAGGAGTGTGA
NM_001089_cds_2_0_chr16_2267881_r_2.rev	CAGGAGACCCATCAGCATCT

(continued)

Supplementary Table S3. Continued

Sequence Name	Sequence
NM_001089_cds_3_0_chr16_2268290_r_1.rev	CAGCCTTATCCCCACCT
NM_001089_cds_3_0_chr16_2268290_r_2.rev	GCAGATGTCTCCCATGTAGG
NM_001089_cds_4_0_chr16_2268945_r_1.rev	GGTAGTCCCCGTGGTCCT
NM_001089_cds_5_0_chr16_2271029_r_1.rev	TGCTCTGCTTTGCGTCCA
NM_001089_cds_5_0_chr16_2271029_r_2.rev	AGATGTAGCGGACGAGAGGA
NM_001089_cds_6_0_chr16_2271383_r_1.rev	GTCTGAGTCGCACCTGTGG
NM_001089_cds_7_0_chr16_2273188_r_1.rev	GCTGTGACCTACTGGCCTTC
NM_001089_cds_8_0_chr16_2274281_r_1.rev	TCCAGCGCAGACTGATCTTA
NM_001089_cds_8_0_chr16_2274281_r_2.rev	GGCCCAGTTCATGCTCAC
NM_001089_cds_9_0_chr16_2274781_r_1.rev	GCCGAGGTGGTGTITAG
NM_001089_cds_9_0_chr16_2274781_r_2.rev	TGCACCCTCAGCCTTACC
NM_001089_cds_10_0_chr16_2275444_r_2.rev	CATGGTGCTTGTGCTCTCC
NM_001089_cds_11_0_chr16_2276696_r_1.rev	GTGACCTGGAGGAGTCTTGA
NM_001089_cds_11_0_chr16_2276696_r_2.rev	CAGCTCCTTCCCGGTTCT
NM_001089_cds_12_0_chr16_2278028_r_1.rev	GCGCGAGTGGAAAATGTT
NM_001089_cds_12_0_chr16_2278028_r_3.rev	AAAATAGTGCCAACGTGCAG
NM_001089_cds_13_0_chr16_2279436_r_2.rev	ATGGTGGCCGGAGACACT
NM_001089_cds_14_0_chr16_2282142_r_1.rev	GTTCAAGTGTCTCTGCTCT
NM_001089_cds_15_0_chr16_2285592_r_1.rev	CTCCGGTCTCTAGCCTCCT
NM_001089_cds_16_0_chr16_2287331_r_1.rev	TCCCTCCAGGTGCTGATACT
NM_001089_cds_16_0_chr16_2287331_r_2.rev	GACTGGAGGCAGTGGGTTT
NM_001089_cds_17_0_chr16_2287768_r_1.rev	CCTCTACCAGAACCTTGCT
NM_001089_cds_18_0_chr16_2288388_r_1.rev	CAGTGGGAGTGGGGTTCC
NM_001089_cds_19_0_chr16_2289405_r_1.rev	AGGGTGTCTGGGACGTGTT
NM_001089_cds_20_0_chr16_2290007_r_1.rev	CCTTCACAGGGATGAACAAG
NM_001089_cds_21_0_chr16_2293971_r_1.rev	GGCCACTTCTGATGTGTC
NM_001089_cds_21_0_chr16_2293971_r_2.rev	TGAATGAGCTGTTGCTGGTC
NM_001089_cds_22_0_chr16_2298452_r_1.rev	GTAGGGGGTTGCTGTACCT
NM_001089_cds_23_0_chr16_2307285_r_1.rev	TTTGTGGTCAGAGACTTCAGAGA
NM_001089_cds_24_0_chr16_2307650_r_1.rev	CAGGAGTTTGAGCAAGATGAG
NM_001089_cds_25_0_chr16_2309583_r_1.rev	CATCTTCCCCCATGGAC
NM_001089_cds_26_0_chr16_2313525_r_1.rev	CGGGGGAGTGGTGTGTTCT
NM_001089_cds_28_0_chr16_2316012_r_12.rev	GCTCTGACCCTGCCATTCT
NM_001089_cds_28_0_chr16_2316012_r_20.rev	CCTGCCATTGCTGTTTTCTG
NM_001089_cds_28_0_chr16_2316012_r_21.rev	CCTCCTCTGGAAGAACTACCC