| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | GACTTTACGCTCTGCTGACCTAGAGGTCTTAGTTCCAGAGGGAGG | 34 0 60 12 0 |
|--|---|---------------------------------|
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | ACACACACATGCACACATACACAGAGTGACAGAGAGACGCAAACACAACCAGAA-A AGACACAACAGTGATTCCATTAAACTAGAATTTACGACTGCCACCTGGCCACATTGAGCT CGTTCCCTCCTTCTGGCCGAGGTGCCTGCGTTTAGGGGTGTCACCCTGGCTCCCGGGACG CCTCTTGGCCGAGGTGACCGGCACCTGCGTTTAGGGGTGTCACCCTGGCTCCTGGGACG | 91 0 120 72 60 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | CCTTCTGTCTGTCAGCAGGACATAGTTTGAGTTTCGACTGACAAAGAGTAGGCGCGAGCTAAGCAGGAGGCGGAG CCACATGCCTCTGAATCAACAGGCAAGGAGAGATTATGGCATTGGCTGGGGAG CCGCCTCCGGAGATTTAAGCGAGAACTGGAGTAGGTCGTGTACTTGGAGCGGACGAGGAA CCGCCTCCGGAGATTTAAGCGAGAGCTGGAGTAGGTCGTGTACTTGGAGTGGACAAGGAA | 136 30 174 132 120 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | ACTTCACACGAAACCAAAGGACAAAGATGAACAGAACTGAAACGATCTACGAGCGGAGGCGGAGGGCGAGGGGCGGGGGGGGGG | 188 86 234 185 173 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | CAATGTCTCTCACGTGAACTACGGTTTCCATGATGAGGAGCAGCGGCCGCCTCCATA GAACAT-TCCAGATACCTATCATTACTCGATGCTGTTGATAACAGCAAGATGGCTTTGAA GAACAT-TCCAGATACCTATCATTACTCGATGCTGTTGATAAAAGCAAGATGGCTTTGAA GAGGAA-GCCCCATACTGACCTCCTCATGCTGCTGACACAGGCAGGATGGCATTGAA GAGGAA-GCCACATACTGACCTCCTCATGCTGCTGACACAGGCAGGATGGCATTGAA * * * *** ** * * * * * * * * * * * * | 245 145 293 241 229 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | TGCACCGTCTTCTGGAGTAAACCCGGCTTTATCTCAGTTCCCCGC CTCAGGGTCACCACCAGCTATTGGACCTTACTATGAAAACCATGGATACCAACCGGAAAA CTCAGGGTCACCGCCAGGTGTTGGACCTTACTACGAAAACCATGGATACCAACCGGAAAA CTCAGGGTCACCTCCAGGAATCGGACCTTGCTATGAGAACCACGGGTATCAGTCTGAGCA CTCAGGGTCACCTCCAGGAATTGGACCTTACTATGAGAACCACGGGTATCAGTCTGAGCA ** ** * * * * * * * * * * * * * * | 290 205 353 301 289 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | CCCTCCAAACACGCAGCATCTGCCCCAAAATCCCCATGTGCTTTACCCTTCACAAAG CCCCTATCCCGCACAGCCCACTGTGGTCCCCACTGTCTACGAGGTGCATCCGGCTCAGTA CCCCTATCCTGCACAGCCCACCGTGGCCCCCAATGTCTACGAGGTGCATCCGGCTCAGTA CATCTGTCCTCCGAGACCACCAGTGGCTCCCAATGGCTACAACTTGTATCCAGCCCAGTA CGTCTATTCCCCGAGGCCACCTGTGTCTCCCAGTGGCTACAACTTGTATCCAGCCCAGAG * * * * * * * * * * * * * * * * * * * | 347 265 413 361 349 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | ATACTCACCTGCGCACAGCCTGCCTCACTACACACCTCAACCAGCACTTATTAAC CTACCCGTCCCCCGTGCCCCAGTACGCCCCGAGGGTCCTGACGCAGGCTTCCAA CTACCCGTCCCCCGTACCCCAGTACACCCCGAGGGTCCTGACGCATGCTTCCAA CTACCCATCTCCAGTGCCTCAGTATGCTCCGAGGATTACAACGCAAGCCTCAAC CTGCCCATCTCCAGTGCCCCAGTATGCTCCGAGAGTCACAACTCAAGCCTCAAC * * * * * * * * * * * * * * * * * * * | 402 319 467 415 403 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | ACTCACCATACAGTCACACCTACAATCTACCTGGACACCAATCCAGTCAACAAAGTTTCC CCCCGTCGTCTGCACGCAGCCCAAATCCCCATCCGGGACAGTGTGCACCTCAAA CCCCGCCGTCTGCAGGCAGCCCCAAATCCCCGTCGGGGACAGTGTGCACCTCAAA ATCTGTCATCCACACACACCCCAAGTCCTCAGGAGCACTGTGCACCTCAAA ACCTGCCATCCACACACACCCCGATCCTCAGGAACACTGTGCACCTCAAA * * * * * * * * * * * * * * * * * | 462 373 521 466 454 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 | AGGAGAAAAAATGGCCATATATTGTGGGCACAGTCGTCACACTGCTGGTCATTGCTGGAGACTAAGAAAGCACTGTGCATCACCTTGACCCTGGGGACCTTCCTCGTGGGAGCTGCGGACTAAGAAAGCACTGTGCGTCACCATGACCCTGGGGGCTGTCCTCGTGGGAGCTGCG | 522 431 579 |

| NM_015775.2 XM_008768547.2 | GTCTAAGAAATCGCTGTGTTTAGCCCTCGCCCTGGGCACTGTCCTCACGGGAGCTGCT ATCTAAGAAATCCATGCTTGTCGCCCTGGCCCTGGGCACTGTCCTCGCCGGTGCTGCT ** *** | 524 512 |
|-------------------------------|---|------------|
| NM_001008623.1 | GTTGTAGTTGCGGTGCTTTGGTTTTATGGGTTGTTTGCGTGTTTGCAAGGACGGATG | 579 |
| NM 005656.4 | CTGGCCGCTGGCCTACTCTGGAAGTTCATGGGCAGCAAGTGCTCCAACTCTGGGATAGAG | 491 |
| XM_028845315.1 | CTGGCCGCTGGCCTGCTCTGGAAGTTCATGGGCAGCAAGTGCTCCGACTCTGGGATAGAG | 639 |
| NM 015775.2 | GTGGCTGCTGTCTTGGAAGTTCATGGGCAAGTGCTCCGACTCTGGGATAGAG | 584 |
| — | GTGGCTGCTTGCTTTGGAGGTTCTGGGACAGCAACTGTTCTACGTCTGAGATGGAG | 572 |
| XM_008768547.2 | * * * * * * * * * * * * * * * * * * * | 5/2 |
| NM_001008623.1 | TGTGAAGCAGATAAAAAGTGTGTCAGTGTGTCGCTGTGGTGTGACGGTACGGTGGACTGT | 639 |
| NM_005656.4 | TGCGACTCCTCAGGTACCTGCATCAACCCCTCTAACTGGTGTGATGGCGTGTCACACTGC | 551 |
| XM_028845315.1 | TGCGACTCCTCAGGTACCTGCATCAGCTCCTCTAACTGGTGCGATGGCGTGTCACACTGC | 699 |
| NM_015775.2 | TGTGGGTCTTCAGGCACATGCATCAGCTCTTCTCTCTGGTGTGACGGGGTAGCACATTGT | 644 |
| XM_008768547.2 | TGTGGGTCTTCAGGGACATGTATCAGCTCCTCCCTCTGGTGTGACGGAGTGTCACAGTGT ** * * * * * ** ** ** ** * * * * ** | 632 |
| NM_001008623.1 | CCGTCAGGAGAAGATGAAGCTCAATGCTATCGTCTGTACGGACCTAATTTCCTCCTTCAG | 699 |
| NM_005656.4 | CCCGGCGGGGAGGACGAGAATCGGTGTGTTCGCCTCTACGGACCAAACTTCATCCTTCAG | 611 |
| XM_028845315.1 | CCGAACGGGGAGGACGAGAACCGGTGTGTTCGCCTCTATGGACCAAACTTCATTCTTCAG | 759 |
| NM_015775.2 | CCCAACGGAGAAGATGAGAACCGTTGTGTTCGTCTCTACGGACAAAGCTTCATCCTCCAG | 704 |
| XM_008768547.2 | CCCAACGGGGAAGACGAGAACCGGTGTGTTCGCCTCTATGGAACAAGCTTCACCCTCCAG | 692 |
| | ** ** ** ** * * * * ** ** ** * * ** ** | |
| NM_001008623.1 | AAGTACTCAAATGTGAGCGCTAATTGGAAAAATGTCTGTTCAGATGGATTTAATGACAAC | 759 |
| NM 005656.4 | GTGTACTCATCTCAGAGGAAGTCCTGGCACCCTGTGTGCCAAGACGACTGGAACGAGAAC | 671 |
| XM_028845315.1 | GTGTACTCATCTCAGAGGAAGTCCTGGCACCCTGTATGCCGAGACGACTGGAACGAGAAC | 819 |
| NM_015775.2 | GTTTACTCATCTCAGAGGAAAGCCTGGTATCCCGTGTGCCAGGATGATTGGAGTGAGAGC | 764 |
| XM_008768547.2 | GTTTACTCATCTCAGAGGAAAGCCTGGTATCCCGTCTGCCAGGATGATTGGAATGAGAGC | 752 |
| | ***** | |
| NM 001008623.1 | CTGGCCAAGCAAGCCTGTGCGGAGATCGGATACAAGGATACATATTCGGGTTATCAGGGA | 819 |
| NM 005656.4 | TACGGGCGGCCTGCAGGGACATGGGCTATAAGAATAATTTTTACTCTAGCCAAGGA | 731 |
| XM 028845315.1 | TACGCGCGGGCAGCCTGCAGGGACATGGGCTATAAGAATAGTTTTTACTCTAGCCAAGGA | 879 |
| NM_015775.2 | TACGGGAGAGCATGTAAAGACATGGGATACAAGAACAATTTTTATTCTAGCCAAGGG | 824 |
| XM_008768547.2 | TACGGGAGAGCATGTAAAGACATGGGATACAAGAACAGCTTTTATTCTAGCCAAGGG | 812 |
| N1_000700347.2 | * ** ** ** ** ** ** * * * * * * * * | 012 |
| NM_001008623.1 | ATTTTGTC | 827 |
| NM 005656.4 | ATAGTGGATGACAGCGGATCCACCAGCTTTATGAAACTGAACACAAGTGCCGGCAATGTC | 791 |
| XM_028845315.1 | ATAGTGGATAACAGTGGAGCCACCAGCTTTATGAAACTGAACACAAGTGCTGGCAACGTC | 939 |
| NM_015775.2 | ATACCAGACCAGAGCGGGCAACGAGCTTTATGAAGCTGAATGTGAGCTCAGGCAACGTT | 884 |
| XM_008768547.2 | ATACCAGACCAGAGCGGGCAACGAGCTTTATGAAGCTGAATGTGAGCGCAGGCAACGTC | 872 |
| X1_000700347.2 | ** | 072 |
| NM_001008623.1 | GCCATCGCTTGACTTCATTTCAGCCTGTCAATCTTCCACAGCAGTGTCACTC | 879 |
| NM_005656.4 | GATATCTATAAAAAACTGTACCACAGTGATGCCTGTTCTTCAAAAGCAGTGGTTTCTTTA | 851 |
| XM_028845315.1 | GATATCTATAAAAAACTGTACCACAGTGACGCCTGTTCTTCAAAAGCAGTGGTTTCTTTA | 999 |
| NM_015775.2 | GACCTCTATAAAAAACTCTACCACAGTGACTCATGTTCATCCCGCATGGTGGTTTCTTTG | 944 |
| XM_008768547.2 | GACCTCTATAAAAAACTCTACCACAGTGACTCGTGCTCATCCCGCATGGTGGTTTTCTTTG * ** ** ** * ** ** ** ** ** ** ** ** * | 932 |
| NM_001008623.1 | AAATGTACTGATTGTGGGCGGAGCACTGGGAACCGGATTGTGGGTGGG | 927 |
| NM_005656.4 | CGCTGTATAGCCTGCGGGGTCAACTTGAACTCAAGCCGCCAGAGCAGGATTGTGGGC | 908 |
| XM_028845315.1 | CGCTGTATAGCTTGTGGGGTCCGCTCAAACTTAAGCCGCCAGAGCAGGATCGTGGGC | 1056 |
| NM_015775.2 | CGCTGTATAGAATGCGGGGTTCGCTCAGTGAAACGCCAGAGCAGGATTGTGGGT | 998 |
| XM_008768547.2 | CGCTGTATAGAATGCGGGGTTCGCTCAGTAAGACGTCAGAGCAGGATTGTGGGT | 986 |
| 74. <u>-</u> 00070031712 | **** * ** *** ** | 300 |
| NM_001008623.1 | ACCACGGTGACCTCAAAGGGCGTGTGGCCATGGCAGGTCAGCCTGCATTATTCCGGAAGG | 987 |
| NM_005656.4 | GGCGAGAGCGCGCTCCCGGGGGCCTGGCCCTGGCAGGTCAGCCTGCACGTCCAGAACGTC | 968 |
| XM_028845315.1 | GGCCAGAACGCGCTCCTAGGGGCCTGGCCCTGGCAGGTCAGTCTGCACGTCCAGAACATC | 1116 |
| NM_015775.2 | GGATTGAATGCCTCACCAGGAGACTGGCCCTGGCAGGTCAGCCTGCACGTCCAAGGCGTC | 1058 |
| XM_008768547.2 | GGGTCGACCGCCTCACCAGGAGACTGGCCCTGGCAGGTCAGCCTGCACGTCCAAGGTATC | 1046 |
| | * * ** ***** ***** ***** | _2.0 |
| NM_001008623.1 | CATCTGTGCGGCGGCTCCATCATCACTCCTTACTGGATCCTTACTGCGGCGCACTGCGTT | 1047 |
| NM_005656.4 | CACGTGTGCGGAGGCTCCATCACCCCCGAGTGGATCGTGACAGCCGCCCACTGCGTG | 1028 |
| | Ended to the control of the control | 2020 |

| XM_028845315.1 NM_015775.2 XM_008768547.2 | CATGTGTGCGGAGGCTCCATCATCACCCCCGAGTGGATCGTGACAGCTGCTCACTGCGTG CACGTCTGCGGAGGCTCCATCATCACCCCCGAGTGGATTGTGACGGCCGCCCACTGTGTG CATGTCTGCGGAGGCTCCATCATCACCCCCGAGTGGATTGTGACAGCCGCCCACTGTGTG ** * ***** *********** * * * ***** * * * | 1176 1118 1106 |
|--|--|--------------------------------------|
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | CATCAGTTTTCAAATCCAGGGGGCTGGACGGTGTATGCTGGATATCTGACCCAATCA GAAAAACCTCTTAACAATCCATGGCATTGGACGGCATTTGCGGGGATTTTGAGACAATCT GAAAAACCTCTTAACAGTCCGTGGCAATGGACGGCATTTGTGGGGACTTTGAGACAATCT GAAGAACCCCTCAGCAGCCCGAGGTACTGGACGGCATTTGCGGGAATTCTGAGACAGTCT GAAGAACCCCTCAGCAGCCCTAGGTACTGGACGGCATTTGCGGGAATTTTGAAACAGTCT * * * * * * * * * * * * * * * * * * * | 1104 1088 1236 1178 1166 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | GAGATGGCGTCGGCCTCCGGAAACTCTGTAAACCGAATTGTCATTCATGATTTCAAC TTCATGTTCTATGGAGCCGGATACCAAGTAGAAAAAGTGATTTCTCATCCAAATTATGAC TCCATGTTCTATGAAAAAGGACACCGAGTAGAAAAAGTGATTTCTCATCCAAATTATGAC CTCATGTTCTATGGAAGTAGACACCAGGTAGAAAAAGTAATTTCCCATCCAAATTACGAC CTCATGTTCTATGGAAGTAGACACCAGGTAGAAAAAGTGATTTCCCATCCAAATTACGAC *** * * * * ** ** ** ** ** ** ** ** ** | 1161 1148 1296 1238 1226 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | CCAAACACCAATGAGAATGATATCGCACTAATGAGGCTAAACACAGCACTCACT | 1221 1208 1356 1298 1286 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | ACGAACATCAGGCCAGTCTGTCTGCCAAATAAAGGCATGAGCTTCACTGCGCAGCAGGAC GACCTAGTGAAACCAGTGTGTCTGCCCAACCCAGGCATGATGCTGCAGCCAGAACAGCTC GAGGTGGTGAAACCAGTATGTCTGCCCAACCCAGGCATGATGCTGGAGCCGGAACAGCAC GATCTAGTGAAGCCAGTGTGTCTGCCGAACCCAGGCATGATGCTAGACCTAGACCAGGAA GATGTAGTGAAGCCAGTGTGTCTGCCGAACCCAGGCATGATGCTGGACCTAGCCCAGGAG * * ***** ******** * ******** * ******* | 1281 1268 1416 1358 1346 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | TGTTACGTCACTGGATGGGGAGCGCTGTTTAGTGGAGGCTCTTCCTCAGCAACCCTACAA TGCTGGATTTCCGGGTGGGGGGCCACCGAGGAGAAAGGGAAGACCTCAGAAGTGCTGAAC TGCTGGATTTCTGGGTGGGGGGCCACCCAGGAGAAAGGGAAGACCTCAGACGTGCTGAAC TGCTGGATTTCGGGGTGGGGGGCCACCTATGAGAAAGGGAAGACCTCGGACGTGTTGAAT TGCTGGATTTCAGGGTGGGGGGCCACCTATGAGAAAGGGAAGACCTCAGATGTGCTGAAT ** * * * * * * * * * * * * * * * * * * | 1341 1328 1476 1418 1406 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | GAGGCCAAAATCCAGCTGATCGACAGCACGATTTGTAACAGCCGGCCTGTGTATAACGGA GCTGCCAAGGTGCTTCTCATTGAGACACAGAGATGCAACAGCAGATATGTCTATGACAAC GCTGCCATGGTGCCTCCATTGAGCCGCGGAGATGCAACAACAAATACGTCTACGACGGC GCTGCCATGGTACCCTTGATCGAGCCCTCCAAATGTAATAGTAAATACATATACAACAAC GCTGCCATGGTACCCTTGATCGAGCCCTCCAAATGTAATAGCAAATACATATACAACAAC * **** * * * * * * * * * * * * * * * * | 1401 1388 1536 1478 1466 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | CTGATCACCGACACCATGATCTGTGCTGGAAAGCTGGCAGGCGGCGTGGACTCCTGTCAG CTGATCACACCAGCCATGATCTGTGCCGGCTTCCTGCAGGGGAACGTCGATTCTTGCCAG CTGATCACACCAGCCATGATCTGTGCCGGCTTCCTGCAGGGGACCGTTGATTCTTGCCAG CTAATCACACCAGCCATGATCTGTGCCGGCTTCCTCCAGGGGTCTGTCGACTCTTGCCAG TTAATCACACCAGCCATGATCTGCGCCGGGTTCCTCCAGGGCTCTGTCGACTCTTGTCAG * ***** | 1461 1448 1596 1538 1526 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | GGGGACAGCGGTGGTCCTCTGGTCACCAATGTGCGCTCTCTCT | 1521 1508 1656 1598 1586 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | ACGAGCTGGGGTGATGGATGCGCTGTCAGAAACAAACCCGGAGTCTACGGAAATGTGACC ACAAGCTGGGGTTCTGGCTGTGCCAAAGCTTACAGACCAGGAGTGTACGGGAATGTGATG ACAAGCTGGGGATCTGGCTGTGCCCAAGCTAACAGACCAGGAGTGTACGGAAATGTGACC ACGAGCTGGGGCTCGGGCTGTGCCAAGGCACTCAGACCTGGAGTATACGGGAACGTGACG ACGAGCTGGGGCTCGGGCTGTGCCAAGGCATACAGACCTGGAGTATACGGGAATGTGACA ** ******* ** ** ** ** ** ********** | 1581 1568 1716 1658 1646 |
| NM_001008623.1 | TACTTCCTTGACTGGATCTACCAGCAAATGCGGAAATATTAGCCTTTTGAATATAAGAGA | 1641 |

| NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | GTATTCACGGACTGGATTTATCGACAAATGAGGGCAGACGGCTAATCCACATGGTCTTCG GTCTTCACGGACTGGATTTATCGACAAATGAGGGCAGATGACTAATCCTCATGGTCTTTG GTATTTACAGATTGGATCTACCAGCAAATGAGGGCGAACAGCTAATCCACGTGGCTTTGT GTATTTACAGATTGGATCTACCAGCAAATGAGGGTAATTTCCTTGATTCCTGGACTGTCC ** ** ***** ** * ****** ** | 1628 1776 1718 1706 |
|--|---|--------------------------------------|
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | AGAGCAGATGCCTTAAGAAAATGGCGTGTACAGGACTGTT-GACTTGACC TCCTTGACGTCGTTTTACAAGAAAACAATGGGGCT-GGTTTTGCT TCCTTGACGTCGTTCTACGAGAAAACAAAGCGGCT-GGTTTTGCT CCCAGACTTCCTTTGTCTTCAACAACCTTCTGCAAGAAAACCAAGGGCCTGAATTTTAAC ATGGACTGTCCATGGACTTGTGAGCTCAAGTCACAGGTCC-GGGAGGAGTGCACATTGTC * * * * | 1690 1672 1820 1778 1765 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | TTGGTCTTGGTGATTTTACTCTGTATTTTAATGTAAATGTTTTCATATGAACC TCCCCGTGCATGATTTACTCTTAGAGATGATTCAGAGGTCACTTCATTTTTATTAAAC TCCCCGTGCGTGATTTACTCTTACAGATGATTCAGAGGTCACTTCATTTTTATTAAAC TTCCTGTGCACAATGTACCTTTTGAGATGATTCGAAGGGCCTTTCACTTTTATTAAAC AGAAAGTGGACACTTTCATGGTCTAGACTTCTCCTGGGTCACCTTTCACTCCCCT * * * * * * * * * * * * * * * * * | 1743 1730 1878 1836 1820 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | TACGAGCTATTTA-TTTGCACGAGTGCCATAAATAAAGAGAATGGCACATTAT AGTGAACTTGTCTGGCTTTGGCACTCTCTGCCATTCTGTGCAGGCTGCAGTGGC AGTGAACTTGCCTGGCTTTGGCACTCTCTGCCATTCTGTGTAGTCTGCAGTGGC AGTGACTTGTTTG-ACTGTGCTCCCTGGTCCTGTGAGGGCTTCAGTGC -GTTCCAGGTCTCCCCATCCCTATGATTTCCCAATTCCTCTCAC * | 1795 1784 1932 1883 1864 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | ACTACAATTTGCACTTTTTTATTTTCTTAAAAGTATGTT TCCCCTGCCCAGCCTGCTCCCCTAACCCCTTGTCCGCAAGGGGTGATGGCCGGCTGGTT TCCACTGCCCAGCCTGTTCTCCCTTAACCCCTTGTCCACAAGGGGTGATGGCCGGCTGGTT CCCACCCCTGGGCCACTTCTGCAGCTCCCACCAGAATGGATGACCAGATTCTG ACCCACTCCAGGCCTATGGTGCCTGTATACTTGGCGGGAGGCACTGTCAACCTCAC * * * * * * * * * * * * * | 1834 1844 1992 1936 1920 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | TTGTGTATAAGAACTAATGAAAAAATGTAAAAGTGTGTACCTGATGATGAGGGTTTT GTGGGCACTGGCGGTCAAGTGTGGAGGAGGAGGGGTGGAGGCTGCCCCATT-GAGATCTTC GTGGACACTGGTGGTCAAGTGTGAAGGAGGAGGGGTGGAGGCTGCCCCATT-GAGATCTTC TTGGGTTTTGGGCACATAGGGCCAAAGGCAGAGGAGGGTGGCACTCTCATGTTGGAACTTC TGGCCTTCCTGCTATCGTTGATGGCAGAGCCAGACTCATAGAACCCC * * * * * * * * * | 1890 1903 2051 1996 1967 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | GTCCCTGATATATTCATGTTTTCTAATTTCAGTGGAGATTTACATTATTACAGT CTGCTGAGTCCTTTCCAGGGGCCAATTTTGGATGAGCATGGAGCTGTCACCTCTCAG-CT CTTTTGAGTCCTTTCCAGGGGCCACTTTCGGATGAGCACGGAGCTGCTGCCTCTCCG-CT TTTTGGGCTCATGCTCAGGCCTTTTTTGGATCACT-AAGGACTATGACCTCTGAG-TA CTTGG* | 1944 1962 2110 2052 1975 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | ATTCGACATCAACAGTGAAACAGTGCATGTCTTTATTTTACAACTATTAACACAAGTTCT GCTGGATGACTTGAGATGAAAAAGGAGAGACATGGAAAGGGAGACAGCCAGGTGGC GCTGGACGACTTCAGATGGAAAAGGAGAGACGTGGAAAGGGAGACAGCCAGGTGGC ACCTGATGACCTGAGAAAGAGTAAGGAG | 2004 2018 2166 2098 1975 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | TTTGTTTGTAAATTGAATGAGAGTGAATATTTTTGGTCTTCTGACTGAATGCCATTT ACCTGCAGCGGCTGCCCTCTGG-GGCCACTT-GGTAGTGTCCCCAGCCTACCTCCCACA ACCTGCAGTGGCTGCCCTCTGG-GGCCACTTGGGTAGTGTCCCCAGCCTAGTTCTCCACA CCCAGGAACAGGTACCTTGAGAGTGAGAGCTACCCATTGCCTGTGGCCTAAATCTGCTGT | 2061 2076 2225 2158 1975 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | TTGTGCGTTTGTTAAATCATATTTTTTACACATTAAATGATTTTTTCATAAATAT AG-GGGATTTTGCTGATGGGTTCTTAGAGCCCTTAGCAGCCCTGGATGGTGGCCAG GG-GGGTTTTGGATGATTGGTTCTTAGTGCCTTAGCAGCCCCGGATGGTGGCTGG GC-AGGTTGGGCTGGTCATACTGTCATGATTTCATTAACAGCCTGGGTGAACATGGCTGG | 2116 2130 2279 2217 1975 |

| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA | 2133 2190 2339 2275 1975 |
|--|--|--------------------------------------|
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | AACATTTTTGTTCTTATGGGGTGAGAATATAGACAGTGCCCTTGGTGCGAGGGAAGCAAT AACATTTTTGTTTTTACAGGGTGAGAATGTAGACAGTGCCCTTGGTGCAAGGGAAGCAAT GGCTTTCCCAAGCTAAGGGCCTAGGCAGATCTCTCAGAGCAAGA | 2133 2250 2399 2319 1975 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | TGAAAAGGAACTTGCCCTGAGCACTCCTGGTGCAGGTCTCCACCTGCACATTGGGTGGG | 2133 2310 2459 2373 1975 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | CTCCTGGGAGGGAGACTCAGCCTTCCTCCTCATCCTCCTGACCCTGCTCCTAGCACCCT CTCCCT TTCTTGGCTCCCCACTACTGTTTCTCTCAGCCTCTCAGAGCCT | 2133 2370 2465 2416 1975 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | GGAGAGTGCACATGCCCCTTGGTCCTGGCAGGGCGCCAAGTCTGGCACCATGTTGG-CCT GGAGATTGCACATGCCCCTTGGTCCTGGCAGGGGGCCAAGTCTGGCACCACATTGG-CCT GAAACTTACCTCTTAGCTTTTGGCTACAGGCATGGCCTAGTACCTGATGGAGCCT | 2133 2429 2524 2470 1975 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | CTTCAGGCCTGCTAGTC-ACTGGAAATTGAGGTCCATGGGGGAAATCAAGGATGCTCAGT CTTCAGGCCTACTAGTC-ACTGGAAATTGAGGTCCATGGGGGAAATCAAGGATGCTCAGT GTATAGCTCAGCTAATCAAATGGAGGCTCAGGTCCATCAGAATCAGGGACTTGTGAT | 2133 2488 2583 2527 1975 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | TTAAGGTACACTGTTTCCATGTTATGTTTCTACACATTGCTACCTCAGTGCTCCTGGAAA TTTAGGTACACTGTTTCCAAGTTATGTTTCTACACATTGCTACCTCAATGCTCCTGGAAT TTCAGTCACCTTGCTTCTGGGTTGTTTTCTTC-TCTTACTACCTCACTGCACCTGGACA | 2133 2548 2643 2586 1975 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | CTTAGCTTTTGATGTCTCCAAGTAGTCCACCTTCATTTAA-CTCTTTGAAACTGTATCAT CTTAGCATTTGATGTCTCCAAGTAGTCCACCTACATTTAA-CTCTGAAACTATCATCT CTAGAGTGGATGAATGTCTGGAGTTCACCTGCATTTGGACTGTGTGATTGTGCCTC | 2133 2607 2700 2642 1975 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | CTTTGCCAAGTAAGAGTGGTGGCCTATTTCAGCTGCTTTGACAAAATGACTGGCTCCTGA TTTTGCCAAGTTTGAGTGGTGGCCTATTTGAGATACTTTGACAAAATGATTGGCTTCTGAGGTTAGGTTGTTC | 2133 2667 2760 2677 1975 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | CTTAACGTTCTATAAATGAA-TGTGCTGAAGCAAAGTGCCCATGGTGGCGGCGAAGAAGA CTTTATGTTCTATAAATGAA-TGTGCTGAAGGAAAGTGCCCATGGTGGCGGTGAAGAAGA TGTAGACTGGCAATGAGATTAGAAGTTCCTAGCTTCAGATAAAGATGAAAGAGAGA | 2133 2726 2819 2734 1975 |

| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | GAAAGATGTGTTTTGTTTTGGACTCTCTGTGGTCCCTTCCAATGCTGTGGGTTTCCAACC GAAAGATGTGTTTTGTTT | 2133 2786 2879 2784 1975 |
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| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | AGGGGAAGGGTCCCTTTTGCATTGCCAAGTGCCATAACCATGAGCACTACTCTACCATGG AGGGGAAGGGTCCCTCTTGTATTACCAAGTGCCATAACCATGAGCACTACTCTAGCATGGATGCCAGAATTACCAAATATGAAGTATGAATGTCTTACCCACGGTGAGG | 2133 2846 2939 2833 1975 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | TTCTGCCTCCTGGCCAAGCAGGCTGGTTTGCAAGAATGAAT | 2133 2906 2999 2891 1975 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | GACTTAACCTTGAAATGGAAAGTCATGCAATCCCATTTGCAGGATCTGTCTG | 2133 2966 3059 2941 1975 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | CCTCTGTAGAGAGCAGCATTCCCAGGGACCTTGGAAAC-AGTTGGCACTGTAAGGTGCTT CCTCTGTAGAGAGCAGCATTCCCAGGCACCTTGGAAAC-AGGTGGCACTATAAGGTGCCT CATGTAAAGAAAACTCCCTCATGCGTCCTCTGGGACCTTCTTAGATGCTGTAAGGTACCT | 2133 3025 3118 3001 1975 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | GCTCCCCAAGACACATCCTAAAAGGTGTTGTAATGGTGAAAACGTCTTCCTTC | 2133 3085 3178 3059 1975 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | CCCCTTCTTATTTATGTGAACAACTGTTTGTCTTTTTTTGTATCTTTTTTAAACTGTAAA CCCCTTTTTATTTATGTGAGCAACCATTTGTCTT-TTTTGTATCTTTTTTAAACTGTAAA CTCCTTGTCTTTGCTGTTGGTTG-GTTATTTCCTGCTTTGTGTCTGTTCTGAGCTGTGAG | 2133 3145 3237 3118 1975 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | GTTCAATTGTGAAAATGAATATCATGCAAATAAATTATGCAATTTTTTTT | 2133 3205 3297 3170 1975 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | TACTGCATCTTTGAAGTTCTGCCTGGTGAGTAGGACCAGCCTCCATTTCCTTATAAGGGG TACTGCATCTTTGAAGTTCTGCCTGGTGAGTAGGACAAGCCTCCATTTCCTTGTAAGGGG AAAAA | 2133 3265 3357 3175 1975 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | GTGATGTTGAGGCTGCTGGTCAGAGGACCAAAGGTGAGGCAAGGCCAGACTTGGTGCTCC GTGATGTTGAGGCTGCTGGTCAGAGGACCAA-GGTGAGGCAAGGTCAGTCTTGGCGCTCC | 2133 3325 3416 3175 1975 |

| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | TGTGGTTGGTGCCCTCAGTTCCTGCAGCCTGTCCTGTTGGAGAGGTCCCTCAAATGAC TCTGGTTGGTGCCCTCAGTTCCTGAAGCCTGTCCTGT | TC 3476 3175 |
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| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | CTTCTTATTATTCTATTAGTCTGTTTCCATGCTCCTAATAAAGACATACCCAAGACTG ATTATTATTCTGTTAGTCTGTTGCCATGCTCCTAATAAAGACATACCCAAGACCA | 3531 3175 |
| NM_001008623.1 NM_005656.4 XM_028845315.1 NM_015775.2 XM_008768547.2 | 2133 ATTTA 3450 3531 3175 1975 | |