**TWNK ENSG00000107815**

**1749 nt**

ATGTGGGTCCTCCTCCGAAGTGGGTACCCCCTCCGTATCTTGTTACCCCTGCGTGGGGAGTGGATGGGTCGGAGGGGCCTGCCCCGAAACTTGGCCCCAGGCCCTCCTCGCAGACGTTACAGGAAGGAGACTCTCCAAGCCTTGGATATGCCAGTGTTGCCTGTAACTGCAACTGAAATCCGCCAGTATTTGCGGGGGCATGGGATCCCCTTCCAGGATGGTCACAGTTGCCTGCGGGCACTGAGCCCCTTTGCAGAGTCTTCACAGCTCAAAGGCCAGACTGGTGTTACCACTTCCTTCAGCCTCTTCATTGACAAGACCACAGGCCACTTTCTCTGCATGACCAGCCTAGCAGAAGGGAGCTGGGAAGACTTCCAGGCCAGCGTGGAGGGGCGAGGGGATGGGGCCAGGGAGGGGTTTCTGCTTAGCAAGGCACCAGAATTTGAGGACAGCGAGGAGGTCCGGAGGATCTGGAACCGAGCAATACCTCTCTGGGAGCTGCCTGATCAGGAGGAGGTTCAGCTGGCTGATACAATGTTTGGCCTTACCAAGGTTACAGATGACACACTCAAGCGTTTCAGTGTGCGATATCTGCGACCTGCTCGCAGTCTTGTCTTCCCTTGGTTCTCCCCTGGGGGCTCAGGATTACGAGGCCTGAAGCTCCTAGAGGCTAAATGCCAGGGGGATGGAGTGAGCTACGAGGAAACCACTATTCCCCGACCCAGCGCCTACCACAATCTGTTTGGATTACCACTGATTAGTCGTCGAGATGCTGAGGTGGTACTGACGAGTCGTGAGCTTGACAGCCTGGCCTTGAACCAGTCCACGGGGCTGCCTACCCTTACTCTACCCCGAGGAACGACCTGCTTACCCCCTGCCTTACTCCCTTACCTGGAACAGTTCCGGCGGATTGTATTCTGGTTGGGGGATGACCTTCGGTCCTGGGAAGCCGCCAAGTTGTTTGCACGAAAACTGAACCCCAAACGATGCTTCTTGGTGCGACCAGGAGACCAGCAACCCCGTCCCCTGGAGGCCCTGAACGGAGGCTTCAATCTTTCTCGTATTCTTCGTACCGCCCTGCCTGCCTGGCACAAGTCCATCGTATCTTTCCGGCAGCTTCGGGAGGAGGTGCTAGGAGAACTGTCAAATGTGGAGCAAGCAGCTGGCCTCCGCTGGAGCCGCTTTCCAGACCTCAATCGTATCTTGAAGGGACATCGAAAGGGCGAGCTGACGGTCTTCACAGGGCCAACAGGCAGTGGAAAGACGACATTCATCAGTGAGTATGCCCTGGATTTGTGTTCCCAGGGGGTGAACACACTGTGGGGTAGCTTCGAGATCAGCAATGTGAGACTAGCCCGGGTCATGCTGACACAGTTTGCCGAGGGGCGGCTGGAAGATCAACTGGACAAATATGATCACTGGGCTGACCGCTTTGAGGACCTGCCCCTCTATTTCATGACTTTCCATGGACAGCAAAGCATCAGGACTGTAATAGATACAATGCAACATGCAGTCTACGTCTATGACATTTGTCATGTGATCATCGACAACCTGCAGTTCATGATGGGTCACGAGCAGCTGTCCACAGACAGGATCGCAGCTCAAGACTACATCATCGGGGTCTTTCGGAAGTTTGCAACAGACAATAACTGCCATGTGACACTGGTCATTCACCCCCGGAAAGAGGATGATGACAAGGAACTGCAGACAGCGTCCATTTTTGGCTCAGCCAAAGTGAGTGGCCTTTAG

Forward (760-780: 20 bp) Tm: 60.02

AGTCGTCGAGATGCTGAGGT

Reverse（967-987: 20 bp）Tm: 59.95

TCGTTTGGGGTTCAGTTTTC

Product: 228 bp

produced by Primer3 (version 0.4.0)

GRCh38.p13 (Ensemble Genome Browser: release 100)