

Product datasheet for **SC307906**

GDNF (NM_199234) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GDNF (NM_199234) Human Untagged Clone
Tag:	Tag Free
Symbol:	GDNF
Synonyms:	astrocyte-derived trophic factor; ATF1; ATF2; glial cell derived neurotrophic factor; glial cell line derived neurotrophic factor; glial derived neurotrophic factor; HFB1-GDNF
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	<p>>OriGene sequence for NM_199234 edited</p> <p>ATGAAGTTATGGGATGTCGTGGCTGTCTGCCTGGTGTCTCCACACCGCGTCCGCCTTC CCGCTGCCAACCCAGAGAATTCAGAGGAAAAGGTCGGAGAGGCCAGAGGGGCAAAAACC GGGGTTGTGTCTTAAGTCAATACATTTAAATGTCACTGACTTGGGTCTGGGCTATGAAA CCAAGGAGGAAGTGAATTTTAGTACTGCAGCGGCTCTTGCGATGCAGCTGAGACAACGT ACGACAAAATATTGAAAACTTATCCAGAAATAGAAGGCTGGTGAGTGACAAAGTAGGGC AGGCATGTTGCAGACCCATCGCCTTTGATGATGACCTGTCGTTTTTAGATGATAACCTGG TTTACCATATTCTAAGAAAGCATTCCGCTAAAAGGTGTGGATGTATCTGA</p>
5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_199234 unedited</p> <p>GGGTTTGCATTTGTATACCACTCCTATAGGGCGGCCGCGATTCTGCAGCCCGGGGATC CGCCCATGAAGTTATGGGATGTCGTGGCTGTCTGCCTGGTGTCTCCACACCGCGTCCG CCTTCCCGCTGCCAACCCAGAGAATTCAGAGGAAAAGGTCGGAGAGGCCAGAGGGGCAA AAACCGGGGTTGTGTCTTAAGTCAATACATTTAAATGTCACTGACTTGGGTCTGGGCTA TGAAACCAAGGAGGAAGTGAATTTTAGTACTGCAGCGGCTCTTGCGATGCAGCTGAGAC AACGTACGACAAAATATTGAAAACTTATCCAGAAATAGAAGGCTGGTGAGTGACAAAGT AGGGCAGGCATGTTGCAGACCCATCGCCTTTGATGATGACCTGTCGTTTTTAGATGATAA CCTGGTTTACCATATTCTAAGAAAGCATTCCGCTAAAAGGTGTGGATGTATCTGAGGGCT AGAGCGGCCGCGGTCATAGCTGTTTCCTGAACAGATCCCGGTGGCATCCCTGTGACCCC TCCCCAGTGCCTCTCCTGGCCCTGGAAGTTGCCACTCCAGTGCCACCAGCCTTGTCTTA ATAAAATTAAGTTGCATCATTTTGTCTGACTAGGTGTCCTTCTATAATATTATGGGGTGG AGGGGGGGTGGTATGGAGCAAGGGGCAAGTTGGGAAGACAACCTGTNAGGCCTGCGGGGT CTATTGGGAACCAAGCTGGAGTGCAAGTGGCACCATCTTGGCTCACTGCAATCTCCGCCTC CTGGGTTCAAGCGATTCTCCTGCCTTAGCCTCCCCGATTGTTGGGATTCCAGGCATGCCT GACCCGGCTCAACTAATTTTGGTTTTTGGTAAAAACGGGGTTTACCCTTTTGGCCAG</p>


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Restriction Sites:	Please inquire
ACCN:	NM_199234
Insert Size:	600 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none"> 1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_199234.1, NP_954704.1</u>
RefSeq Size:	410 bp
RefSeq ORF:	402 bp
Locus ID:	2668
Cytogenetics:	5p13.2
Protein Families:	Druggable Genome, Secreted Protein, Transmembrane

Gene Summary:

This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate each subunit of the disulfide-linked homodimer. The recombinant form of this protein, a highly conserved neurotrophic factor, was shown to promote the survival and differentiation of dopaminergic neurons in culture, and was able to prevent apoptosis of motor neurons induced by axotomy. This protein is a ligand for the product of the RET (rearranged during transfection) protooncogene. Mutations in this gene may be associated with Hirschsprung disease and Tourette syndrome. This gene encodes multiple protein isoforms that may undergo similar proteolytic processing. [provided by RefSeq, Aug 2016]

Transcript Variant: This variant (3) lacks an alternate segment in the 5' UTR and uses a downstream start codon, compared to variant 1. Isoform 3 has a shorter and distinct N-terminus, compared to isoform 1.