

## **Product datasheet for SC307904**

## **GDNF (NM\_199231) Human Untagged Clone**

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** GDNF (NM\_199231) Human Untagged Clone

Tag: Tag Free Symbol: GDNF

**Synonyms:** ATF; ATF1; ATF2; HFB1-GDNF; HSCR3

Mammalian Cell None

Selection:

Vector: pCMV6-XL5

**E. coli Selection:** Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM\_199231 edited

ATGAAGTTATGGGATGTCGTGGCTGTCTGCCTGGTGCTCCACACCGCGTCCGCCTTC
CCGCTGCCCGCCGAAATATGCCAGAGGATTATCCTGATCAGTTCGATGATGTCATGGAT
TTTATTCAAGCCACCATTAAAAGACTGAAAAGGTCACCAGATAAACAAATGGCAGTGCTT
CCTAGAAGAGAGGCGGAATCGGCAGGCTGCAGCTGCCAACCCAGAGAATTCCAGAGGAAAA
GGTCGGAGAGGCCAGAGGGGCAAAAACCGGGGTTGTGTCTTAACTGCAATACATTTAAAT
GTCACTGACTTGGGTCTGGGCTATGAAACCAAGGAGGAACTGATTTTTAGGTACTGCAGC
GGCTCTTGCGATGCAGCTGAGACAAACGTACGACAAAATATTGAAAAACTTATCCAGAAAT
AGAAGGCTGGTGAGTGACAAAGTAGGGCAGGCATGTTGCAGACCCATCGCCTTTGATGAT
GACCTGTCGTTTTTAGATGATAACCTGGTTTACCATATTCTAAGAAAGCATTCCGCTAAA

AGGTGTGGATGTATCTGA

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5' Read Nucleotide Sequence: >OriGene 5' read for NM\_199231 unedited GGTCAGCATTTGTATACGACTCCTATAGGCGGCCGCGNATTCCTGCAGCCCGGGGGATCC GCCCATGAAGTTATGGGATGTCGTGGCTGTCTGCCTGGTGCTCCACACCGCGTCCGC CTTCCCGCTGCCCGCCAAATATGCCAGAGGATTATCCTGATCAGTTCGATGATGTCAT GGATTTTATTCAAGCCACCATTAAAAGACTGAAAAGGTCACCAGATAAACAAATGGCAGT GCTTCCTAGAAGAGAGCGGAATCGGCAGGCTGCAGCTGCCAACCCAGAGAATTCCAGAGG AAAAGGTCGGAGAGGCCAGAGGGGCAAAAACCGGGGTTGTGTCTTAACTGCAATACATTT AAATGTCACTGACTTGGGTCTGGGCTATGAAACCAAGGAGGAACTGATTTTTAGGTACTG CAGCGGCTCTTGCGATGCAGCTGAGACAACGTACGACAAAATATTGAAAAACTTATCCAG AAATAGAAGGCTGGTGAGTGACAAAGTAGGGCAGGCATGTTGCAGACCCATCGCCTTTGA TGATGACCTGTCGTTTTTAGATGATAACCTGGTTTACCATATTCTAAGAAAGCATTCCGC TAAAAGGTGTGGATGTATCTGAGGGCTAGAGCGGCCGCGGTCATAGCTGTTTCCTGAACA GATCCCGGGTGGCATCCCTGTGACCCCTNCCCAGTGCCTCTCCTGGCCCTGGAAGTTGCC ACTCCAGTGCCCACCAGCCTTGTCCTAATAAAATTAAAGTGCATCATTTTGTCTGACTAG GTGTCCTTCTATATATTATGGGGTGAGGGGGGGGGGGATTGGAACAAAGGGCCAGNTGGGA AAAACACCTGTAAGGCCTGCCGGGTCTATTGGGAACAAGCTGAATTGCAGTGGCCCAATC

Restriction Sites: Please inquire
ACCN: NM\_199231
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:** 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.

**RefSeg:** NM 199231.1, NP 954701.1

RefSeq Size: 681 bp
RefSeq ORF: 558 bp
Locus ID: 2668
UniProt ID: P39905
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 (2) differs in the 5' UTR, represents use of an alternate promoter, uses a downstream start codon, and uses an alternate in-frame splice site in the coding region, compared to variant 3. The resulting isoform (2) has a shorter N-terminus and lacks an internal segment, compared to isoform 3. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.