

Product datasheet for **SC334052**

GDNF (NM_001278098) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GDNF (NM_001278098) Human Untagged Clone
Tag:	Tag Free
Symbol:	GDNF
Synonyms:	ATF; ATF1; ATF2; HFB1-GDNF; HSCR3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC334052 representing NM_001278098. Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
 GATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**
 ATGCCAGAGGATTATCCTGATCAGTTCGATGATGTCATGGATTTTATTCAAGCCACCATTAAAGACTG
 AAAAGGTCACCAGATAAACAAATGGCAGTGCTTCCTAGAAGAGAGCGGAATCGGCAGGCTGCAGCTGCC
 AACCCAGAGAATCCAGAGGAAAAGGTCGGAGAGGCCAGAGGGGCAAAACCGGGTTGTGCTTAACT
 GCAATACATTTAAATGCTACTGACTTGGGTCTGGGCTATGAAACCAAGGAGGAAGTATTTTAGGTAC
 TGCAGCGGCTCTTGCATGCAGCTGAGACAACGTACGACAAAATATTGAAAACTATCCAGAAATAGA
 AGGCTGGTGAGTGACAAAGTAGGGCAGGCATGTTGCAGACCCATCGCCTTTGATGATGACCTGTCGTTT
 TTAGATGATAACCTGTTTACCATTCTAAGAAAGCATTCCGCTAAAAGGTGTGGATGTATC**TGA**
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
 TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites:	SgfI-MluI
ACCN:	NM_001278098
Insert Size:	480 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).
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).


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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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001278098.1](#)

RefSeq Size: 3638 bp

RefSeq ORF: 480 bp

Locus ID: 2668

UniProt ID: [P39905](#)

Cytogenetics: 5p13.2

Protein Families: Druggable Genome, Secreted Protein, Transmembrane

MW: 18.1 kDa

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 (6) has a unique internal exon, which causes translation initiation at a downstream AUG, compared to variant 1. The encoded isoform (5) has a shorter N-terminus, compared to isoform 1. 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.