

## Product datasheet for MC208539

### Gdnf (NM\_010275) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Gdnf (NM_010275) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Gdnf
Synonyms:	AI385739; ATF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC208539 representing NM_010275 Red=Cloning site Blue=ORF Orange=Stop codon

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGATTCGGGCCACTTGGAGTTAATGTCCAACCTGGGGTCTACGGAGACCGGATCCGAGGTGCCGCCG  
CCGGACGGGACTCTAAGATGAAGTTATGGGATGTCGTGGCTGTCTGCCTGGTGTGCTCCACACCGCGTC  
TGCTTCCCGCTGCCCGCGTAAGAGGCTTCTGAAGCGCCGCTGAAGACCACTCCCTCGGCCACCGC  
CGCGTGCCCTTCGCGTGACCACTGACTCCAATATGCCTGAAGATTATCCTGACCACTTTGATGACGTCA  
TGGATTTTATTCAAGCCACCATTAAAAGACTGAAAAGGTCACCAGATAACAAGCGGCAGCGCTTCCTCG  
AAGAGAGAGGAATCGGCAGGCTGCAGCTGCCAGCCAGAGAATCCAGAGGGAAGGTGCGAGAGGCCAG  
AGGGGCAAAAATCGGGGTGCGTTTAACTGCCATACACTTAAATGTCACTGACTTGGGTTTGGGCTATG  
AAACCAAGGAGGAAGTATCTTTCGATATTGCAGCGGTTCTGTGAATCGGCCGAGACAATGTATGACAA  
AATACTAAAAACCTGTCTCGGAGTAGAAGGCTAACAAAGTGACAAAGTAGGCCAGGCATGTTGCAGGCCG  
GTCGCCTTCGACGACGACCTGTCGTTTTAGATGACAACCTGGTTTACCATATTCTAAGAAAGCATTCCG  
CTAAACGGTGTGGATGTAT**CGA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Chromatograms:	<a href="https://cdn.origene.com/chromatograms/ja1796_c08.zip">https://cdn.origene.com/chromatograms/ja1796_c08.zip</a>
Restriction Sites:	SgfI-MluI
ACCN:	NM_010275
Insert Size:	723 bp


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<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a></p>
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">BC119031</a> , <a href="#">AAI19032</a>
<b>RefSeq Size:</b>	4477 bp
<b>RefSeq ORF:</b>	723 bp
<b>Locus ID:</b>	14573
<b>UniProt ID:</b>	<a href="#">P48540</a>
<b>Cytogenetics:</b>	15 A1

**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. Homozygous knockout mice for this gene exhibit defects in kidney development and neonatal death. This gene encodes multiple protein isoforms that may undergo similar proteolytic processing. [provided by RefSeq, Aug 2016]

Transcript Variant: This variant (1) encodes the longest 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.