

## Product datasheet for **MR228653**

### Gdnf (NM\_001301333) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Gdnf (NM_001301333) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gdnf
Synonyms:	AI385739; ATF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR228653 representing NM_001301333 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGC**C

ATGGAAATGAATTCGTCTCCGAGCAGTGGGAGGTGCCGCCGCCGACGGGACTCTAAGATGAAGTTAT  
 GGGATGTCGTGGCTGTCTGCCTGGTGTGCTCCACACCGCGTCTGCCTTCCCGCTGCCGCCGGTAAGAG  
 GCTTCTCGAAGCGCCCGCTGAAGACCACTCCCTCGGCCACCGCCGCGTCCCTTCGCGCTGACCACTGAC  
 TCCAATATGCCTGAAGATTATCCTGACCACTTTGATGACGTATGGATTTTATTCAAGCCACCATTAAAA  
 GACTGAAAAGGTCAACAGATAAACAAGCGGCAGCGCTTCTCGAAGAGAGAGGAATCGGCAGGCTGCAGC  
 TGCCAGCCCAGAGAATTCAGAGGGAAAGTTCGCAGAGGCCAGAGGGGCAAAATCGGGGTGCGTTTTTA  
 ACTGCCATACACTTAAATGTCACTGACTTGGGTTTGGGCTATGAAACCAAGGAGGAATGATCTTTTCGAT  
 ATTGCAGCGGTTCTGTGAATCGGCCGAGACAATGTATGACAAAATACTAAAAACCTGTCTCGGAGTAG  
 AAGGCTAACAAGTGACAAAGTAGGCCAGGCATGTTGCAGGCCGGTCGCCTTCGACGACGACCTGTCGTTT  
 TTAGATGACAACCTGGTTTACCATATTCTAAGAAAGCATTCCGCTAAACGGTGTGGATGTATC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA


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**Protein Sequence:** >MR228653 representing NM\_001301333

Red=Cloning site Green=Tags(s)

MEFVFSAAVGGAAAGRDSKMKLWDVVAVCLVLLHTASAFPLPAGKRLLLEPAEDHSLGHRVPFALTS  
SNMPEDYPDQFDDVMDFIQATIKRLKRSPDKQAAALPRRERNRQAAAAASPENSRGKGRRGQGRKNGCVL  
TAIHLNVTDLGLGYETKEELIFRYCSGSCSAETMYDKILKNLSRSRRLTSDKVGQACCRPVAFDDDL  
SFIDNNI VYHTI RKHSACRCGCT

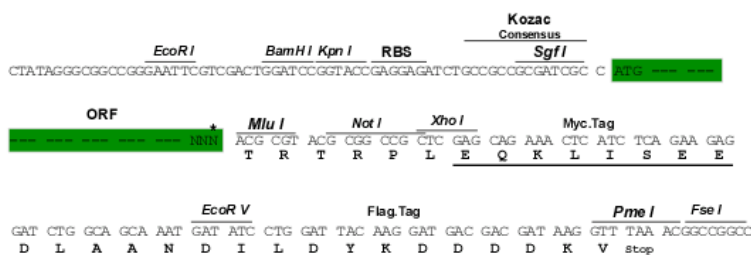
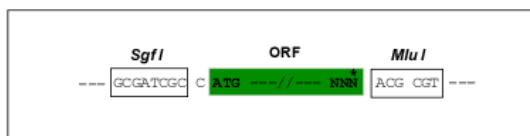
TRTRPLEOKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

### Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

ACCN: NM 001301333

ORF Size: 693 bp

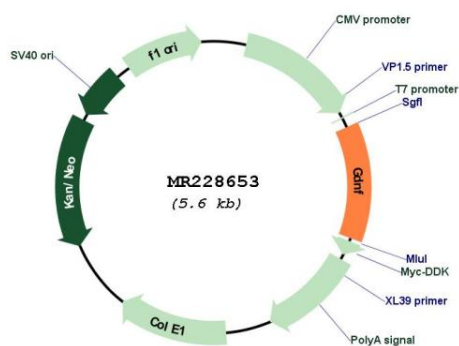
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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).

<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>	<u>NM_001301333.1, NP_001288262.1</u>
<b>RefSeq Size:</b>	3761 bp
<b>RefSeq ORF:</b>	696 bp
<b>Locus ID:</b>	14573
<b>Cytogenetics:</b>	15 A1
<b>MW:</b>	26.1 kDa
<b>Gene Summary:</b>	<p>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]</p>

## Product images:



Circular map for MR228653