

Product datasheet for MR228552

Gdnf (NM 001301332) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Gdnf (NM_001301332) Mouse Tagged ORF Clone

Tag: Myc-DDK

Symbol: Gdnf

Synonyms: Al385739; ATF

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >MR228552 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

TGTGGATGTATC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR228552 protein sequence

Red=Cloning site Green=Tags(s)

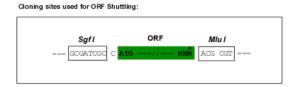
MGFGPLGVNVQLGVYGDRIRGAAAGRDSKMKLWDVVAVCLVLLHTASAFPLPAANMPEDYPDQFDDVMDF IQATIKRLKRSPDKQAAALPRRERNRQAAAASPENSRGKGRRGQRGKNRGCVLTAIHLNVTDLGLGYETK EELIFRYCSGSCESAETMYDKILKNLSRSRRLTSDKVGQACCRPVAFDDDLSFLDDNLVYHILRKHSAKR CGCI

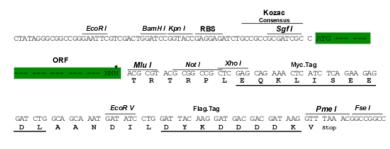
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_001301332

ORF Size: 642 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).



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.

RefSeq: <u>NM 001301332.1</u>, <u>NP 001288261.1</u>

RefSeq Size: 4399 bp
RefSeq ORF: 645 bp
Locus ID: 14573
UniProt ID: P48540

Cytogenetics: 15 A1

MW: 23.7 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

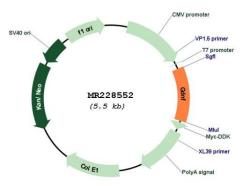
expression. The encoded preproprotein is proteolytically processed to generate each subunit of the disulfide-linked homodimer. The recombinant form of this protein, a highly conserved neurotrophic factor, was shown to promote the survival and differentiation of dopaminergic neurons in culture, and was 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. 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]



Product images:



Circular map for MR228552