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Product datasheet for MC209031

Ngf (NM_001112698) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ngf (NM_001112698) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ngf
Synonyms:	beta-NGF; Ngfb
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>NM_001112698.1 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGTCCATGTTGTTCTACACTCTGATCACTGCGTTTTTGATCGGCGTACAGGCAGAACCGTACACAGATA GCAATGTCCCAGAAGGAGACTCTGTCCCTGAAGCCCACTGGACTAAACTTCAGCATTCCCTTGACACAGC CCTCCGCAGAGCCCGCAGTGCCCCTACTGCACCAATAGCTGCCCGAGTGACAGGGCAGACCCGCAACATC ACTGTAGACCCCAGACTGTTTAAGAAACGGAGACTCCACTCACCCCGTGTGCTGTTCAGCACCCAGCCTC CACCCACCTCTTCAGACACTCTGGATCTAGACTTCCAGGCCCATGGTACAATCCCTTTCAACAGGACTCA CCGGAGCAAGCGCTCATCCACCCACCCAGTCTTCCACATGGGGGAGTTCTCAGTGTGTGACAGTGTCAGT GTGTGGGTTGGAGATAAGACCACAGCCACAGACATCAAGGGCAAGGAGGTGACAGTGCTGGCCGAGGTGA ACATTAACAACAGTGTATTCAGACAGTACTTTTTTGAGACCAAGTGCCGAGCCTCCAATCCTGTTGAGAG TGGGTGCCGGGGCATCGACTCCAAACACTGGAACTCATACTGCACCACGACTCACACCTTCGTCAAGGCG TTGACAACAGATGAGAAGCAGGCTGCCTGGAGGTTCATCCGGATAGACACAGCCTGTGTGTGTGTGCTCA GCAGGAAGGCTACAAGAAGAGGCTGA ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA
Chromatograms:	https://cdn.origene.com/chromatograms/ja1471_g06.zip
Restriction Sites:	SgfI-MluI
ACCN:	NM_001112698
Insert Size:	726 bp

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OTI Disclaimer: 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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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

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: NM_001112698.1, NP_001106168.1

RefSeq Size: 1060 bp

RefSeq ORF: 726 bp

Locus ID: 18049

UniProt ID: P01139

Cytogenetics: 3 45.25 cM

Gene Summary: Nerve growth factor is important for the development and maintenance of the sympathetic and sensory nervous systems (PubMed:20036257). Extracellular ligand for the NTRK1 and NGFR receptors, activates cellular signaling cascades to regulate neuronal proliferation, differentiation and survival (PubMed:22649032). The immature NGF precursor (proNGF) functions as ligand for the heterodimeric receptor formed by SORCS2 and NGFR, and activates cellular signaling cascades that lead to inactivation of RAC1 and/or RAC2, reorganization of the actin cytoskeleton and neuronal growth cone collapse (PubMed:22155786). In contrast to mature NGF, the precursor form (proNGF) promotes neuronal apoptosis (in vitro) (PubMed:20036257). Inhibits metalloproteinase-dependent proteolysis of platelet glycoprotein VI (By similarity). Binds lysophosphatidylinositol and lysophosphatidylserine between the two chains of the homodimer (PubMed:22649032, PubMed:26144237). The lipid-bound form promotes histamine relase from mast cells, contrary to the lipid-free form (PubMed:22649032).[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (2) contains a distinct 5' UTR and lacks an in-frame portion of the 5' coding region compared to variant 1. The resulting isoform (B) has a shorter N-terminus compared to isoform A. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.