

Product datasheet for **RN216118**

Ngf (NM_001277055) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ngf (NM_001277055) Rat Untagged Clone
Tag: Tag Free
Symbol: Ngf
Synonyms: beta-NGF; Ngfb
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >RN216118 representing NM_001277055
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCCATGTTGTTCTACACTCTGATCACAGCGTTTTTGGATCGGGCTACAGGCAGAACCGTACACAGATA
 GCAATGTCCCAGAGGGGAGACTCTGTCCCTGAAGCCCACTGGACTAACTTCAGCATTCCCTTGACACAGC
 CCTCCGCAGAGCCCGCAGTGCCCTGCTGAACCAATAGCTGCCCGTGTGACAGGGCAGACCCGCAACATC
 ACTGTGGACCCCAAAGTGTAAAGAAACGAGACTCCGTTCAACCCGCGTGTCTTTAGCACCCAGCCTC
 CACCCACCTCTTCGGACTCTGGATTTAGACTCCAGGCCCATGGTACAATCTCCTTCAACAGGACTCA
 CAGGAGCAAGCGCTCATCCACCCACCCAGTCTCCACATGGGGGAGTTTTTCAGTGTGTGACAGTGTCAGT
 GTGTGGTTGGAGATAAGACCACAGCCACGGACATCAAGGGCAAGGAGGTGACAGTGTGGGCGAGGTGA
 ACATTAACAACAGTGTATTCAAACAGTATTTTTTGGACCAAGTGCCGAGCCCCGAATCCTGTAGAGAG
 TGGATGCCGGGCATTGACTCCAAGCACTGGAATCATACTGCACCAGACTCACACCTTTGTCAAGGCG
 TTGACAACAGACGACAAACAGGCTGCCTGGAGTTCATCAGGATAGATACAGCCTGCGTGTGTGTCTCA
 GCAGGAAGGCTGCAAGAAGAGGC**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001277055
Insert Size: 726 bp



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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).
OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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:	<ol style="list-style-type: none"> 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_001277055.1, NP_001263984.1</u>
RefSeq Size:	1075 bp
RefSeq ORF:	726 bp
Locus ID:	310738
UniProt ID:	<u>P25427</u>
Cytogenetics:	2q34
Gene Summary:	Nerve growth factor is important for the development and maintenance of the sympathetic and sensory nervous systems. Extracellular ligand for the NTRK1 and NGFR receptors, activates cellular signaling cascades to regulate neuronal proliferation, differentiation and survival (By similarity). 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. In contrast to mature NGF, the precursor form (proNGF) promotes neuronal apoptosis (in vitro) (By similarity). Inhibits metalloproteinase-dependent proteolysis of platelet glycoprotein VI (By similarity). Binds lysophosphatidylinositol and lysophosphatidylserine between the two chains of the homodimer. The lipid-bound form promotes histamine release from mast cells, contrary to the lipid-free form (By similarity).[UniProtKB/Swiss-Prot Function]