

Product datasheet for **MG225453**

Ngf (NM_013609) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ngf (NM_013609) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ngf
Synonyms:	beta-NGF; Ngfb
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG225453 representing NM_013609 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGTGCCTCAAGCCAGTGAATTAGGCTCCCTGGAGGTGGGACACGGGCAGCATGGTGGAGTTTTGG
CCTGTGGTCGTGCAGTCCAGGGGCTGGATGGCATGCTGGACCAAGCTCACCTCAGTGTCTGGGCCAA
TAAAGTTTTGCCAAGGACGCAGCTTTCTATACTGGCCGAGTGAGGTGCATAGCGTAATGTCCATGTTG
TTCTACACTCTGATCACTGCGTTTTGATCGGCGTACAGGCAGAACCGTACACAGATAGCAATGTCCAG
AAGGAGACTCTGTCCCTGAAGCCACTGGACTAACTTCAGCATTCCCTTGACACAGCCCTCCGCAGAGC
CCGAGTGCCCTACTGCACCAATAGCTGCCCGAGTGACAGGGCAGACCCGCAACATCACTGTAGACCCC
AGACTGTTTAAGAAACGGAGACTCCACTCACCCGTGTGCTGTTTCAGCACCCAGCCTCCACCCACCTCTT
CAGACACTCTGGATCTAGACTTCCAGGCCATGGTACAATCCCTTTCAACAGGACTCACCGGAGCAAGCG
CTCATCCACCCACCCAGTCTTCCACATGGGGGAGTTCTCAGTGTGTGACAGTGTGAGTGTGGTTGGA
GATAAGACCACAGCCACAGACATCAAGGGCAAGGAGGTGACAGTGTGCGCGAGGTGAACATTAACAACA
GTGTATTCAGACAGTACTTTTTGAGACCAAGTGCCGAGCCTCCAATCCTGTTGAGAGTGGGTGCCGGG
CATCGACTCCAACACTGGAACCTACTGCACCAGACTCACACCTTCGTCGAAGCGTTGACAACAGAT
GAGAAGCAGGCTGCCTGGAGTTCATCCGGATAGACACAGCCTGTGTGTGTGCTCAGCAGGAAGGCTA
CAAGAAGAGGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG225453 representing NM_013609
Red=Cloning site Green=Tags(s)

MLCLKPVKLGSLLEVGHGQHGGVLACGRAVQGAGWHAGPKLTSVSGPNKGF AKDAAFYTRSEVHSVMSML
 FYTLITAFILIGVQAEPYTDNSNVEGDSVPEAHWTKLQHSLDTALRRARSAPTAPIAARVTGQTRNITVDP
 RLFKKRRLLHSPRVLFSTQPPPTSSDTLDFQAHGTIPFNRTHRSKRSSTHPVFHMGESVCDSDSVVWVG
 DKTTATDIKKEVTVLAEVNINNSVFRQYFFETKCRASNPVSESGCRGIDSKHWNSYCTTTHTFVKALTTD
 EKQAARFIRIDTACVCLSRKATRRG

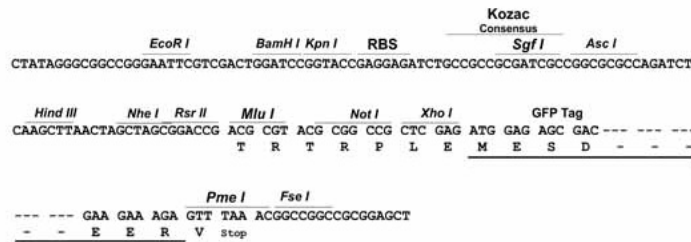
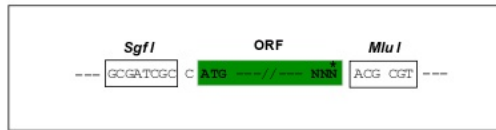
TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja3243_a10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_013609

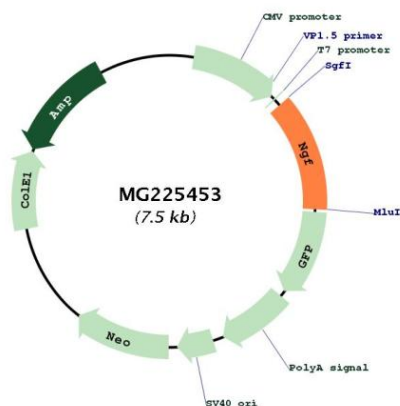
ORF Size: 921 bp

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](#)

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:	<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:	NM_013609.3 , NP_038637.1
RefSeq Size:	1196 bp
RefSeq ORF:	924 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 release from mast cells, contrary to the lipid-free form (PubMed:22649032).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG225453