

Product datasheet for **RG221463**

NGF (NM_002506) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: NGF (NM_002506) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: NGF
Synonyms: Beta-NGF; HSN5; NGFB
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG221463 representing NM_002506
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCATGTTGTTCTACTCTGATCACAGCTTTTCTGATCGGCATACAGGCGGAACCACACTCAGAGA
GCAATGTCCTGCAGGACACACCATCCCCAAGCCCACTGGACTAACTTCAGCATTCCCTTGACTGCG
CCTTCGCAGAGCCCGCAGCGCCCGGCAGCGCGATAGCTGCACGCGTGGCGGGCAGACCCGCAACATT
ACTGTGGACCCAGGCTGTTAAAAAGCGCGACTCCGTTCAACCCGTGTGCTGTTAGCACCCAGCCTC
CCCGTGAAGCTGCAGACTCAGGATCTGGACTTCGAGGTCGGTGGTGTGCCCCCTTCAACAGGACTCA
CAGGAGCAAGCGGTCATCATCCCATCCCATCTTCCACAGGGCGAATTCTCGGTGTGTGACAGTGTGAGC
GTGTGGTTGGGATAAGACCACCGCCACAGACATCAAGGGCAAGGAGGTGATGGTGTGGAGAGGTGA
ACATTAACAACAGTGTATTCAAACAGTACTTTTTGAGACCAAGTGCCGGGACCCAAATCCCGTTGACAG
CGGGTGCCGGGCATTGACTCAAAGCACTGGAACATATTGTACCAGACTCACACCTTTGTCAAGGCG
CTGACCATGGATGGCAAGCAGGCTGCCTGGCGTTTATCCGGATAGATACGGCCTGTGTGTGTGTCTCA
GCAGGAAGGCTGTGAGAAGGCC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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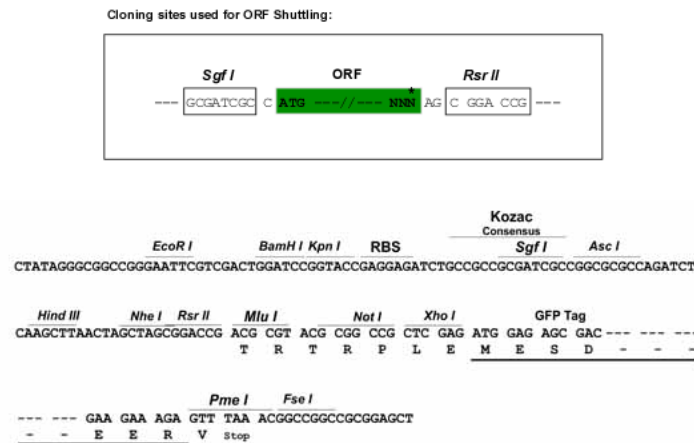
Protein Sequence: >RG221463 representing NM_002506
Red=Cloning site Green=Tags(s)

MSMLFYTLITAFLLIGIQAEPHSESNVPAGHTIPQAHWTKLQHSLDTALRRARSAPAAAAIAARVAGQTRNI
 TVDPRLFKKRRRLRSPRVLFSTQPPREAADTQDLDFEVGGAAPFNRTHRSKRSSSHPIFHRGEFVSCDSVS
 VVWGDKTTATDIKGEKVMVLGEVNINNSVFKQYFFETKCRDPNPVDSGCRGIDSKHWNSYCTTTHTFVKVA
 LTMDGKQAAWRFIRIDTACVCLSRKAVRRA

SGPTRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_002506

ORF Size: 723 bp

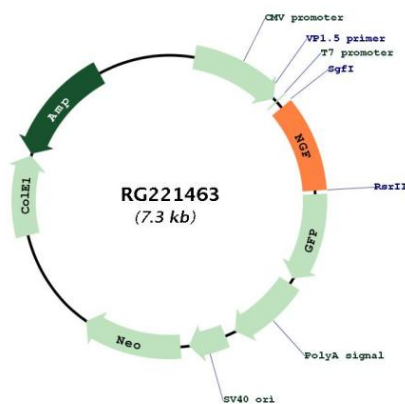
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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:**
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_002506.3](#)
- RefSeq Size:** 1052 bp
- RefSeq ORF:** 726 bp
- Locus ID:** 4803
- UniProt ID:** [P01138](#)
- Cytogenetics:** 1p13.2
- Protein Families:** Druggable Genome, Secreted Protein
- Protein Pathways:** Apoptosis, MAPK signaling pathway, Neurotrophin signaling pathway
- Gene Summary:** This gene is a member of the NGF-beta family and encodes a secreted protein which homodimerizes and is incorporated into a larger complex. This protein has nerve growth stimulating activity and the complex is involved in the regulation of growth and the differentiation of sympathetic and certain sensory neurons. Mutations in this gene have been associated with hereditary sensory and autonomic neuropathy, type 5 (HSAN5), and dysregulation of this gene's expression is associated with allergic rhinitis. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG221463