

## Product datasheet for **RC221463**

### NGF (NM\_002506) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** NGF (NM\_002506) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** NGF  
**Synonyms:** Beta-NGF; HSN5; NGFB  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC221463 representing NM\_002506  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCCATGTTGTTCTACTCTGATCACAGCTTTTCTGATCGGCATACAGGCGGAACCACACTCAGAGA  
GCAATGTCCCTGCAGGACACACCATCCCCAAGTCCACTGGACTAACTTCAGCATTCCCTTGACTGCG  
CCTTCGAGAGCCCGCAGCGCCCGGCAGCGCGATAGCTGCACGCGTGGCGGGCAGACCCGCAACATT  
ACTGTGGACCCAGGCTGTTAAAAAGCGCGACTCCGTTACCCCGTGTGCTGTTAGCACCCAGCCTC  
CCCGTGAAGCTGCAGACTCAGGATCTGGACTTCGAGGTCGGTGGTGTGCCCCCTTCAACAGGACTCA  
CAGGAGCAAGCGGTATCATCCATCCATCTTCCACAGGGCGAATTCTCGGTGTGTGACAGTGTGACG  
GTGTGGTTGGGATAAGACCACCGCCACAGACATCAAGGGCAAGGAGGTGATGGTGTGGAGAGGTGA  
ACATTAACAACAGTGTATTCAAACAGTACTTTTTGAGACCAAGTCCCGGACCCAAATCCCGTTGACAG  
CGGGTCCCGGGCATTGACTCAAAGCACTGGAATCATATTGTACCAGACTCACACCTTTGTCAAGGCG  
CTGACCATGGATGGCAAGCAGGCTGCCTGGCGTTTATCCGGATAGATACGGCCTGTGTGTGTGTCTCA  
GCAGGAAGGCTGTGAGAAGAGCC

AG**CGGACCG**ACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
TGGATTACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC221463 representing NM\_002506  
 Red=Cloning site Green=Tags(s)

```
MSMLFYTLITAFLLIGIQAEPHSESNVPAGHTIPQVHWTKLQHSLDTALRRARSAPAAAIAARVAGQTRNI
TVDPRLLFKRRLRSPRVLFSTQPPREAADTQDLDFEVGGAAPFNTRHSKRSSSHPIFHRGEFSVCDVS
VWVGDKTTATDIKGEKVMVLGEVNINNSVFKQYFFETKCRDPNPVDSGCRGIDSKHWNSYCTTTHTFVKA
LTMDGKQAAWRFI RIDTACVCLSRKAVRRA
```

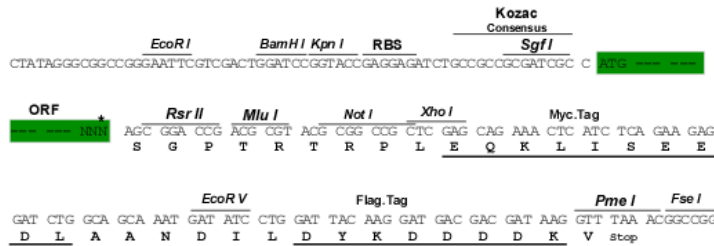
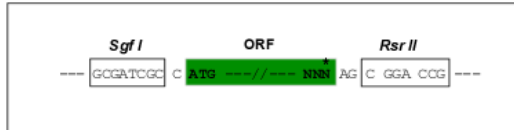
SGPTRRRLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2567\\_c01.zip](https://cdn.origene.com/chromatograms/mg2567_c01.zip)

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_002506

**ORF Size:** 723 bp

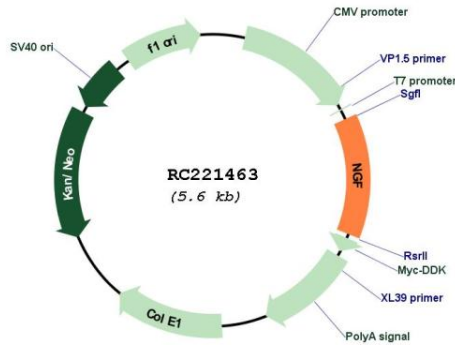
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of 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](mailto: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](#)

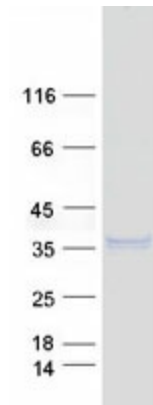
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_002506.1</a>
<b>RefSeq Size:</b>	1052 bp
<b>RefSeq ORF:</b>	726 bp
<b>Locus ID:</b>	4803
<b>UniProt ID:</b>	<a href="#">P01138</a>
<b>Cytogenetics:</b>	1p13.2
<b>Protein Families:</b>	Druggable Genome, Secreted Protein
<b>Protein Pathways:</b>	Apoptosis, MAPK signaling pathway, Neurotrophin signaling pathway
<b>MW:</b>	26.99 kDa
<b>Gene Summary:</b>	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 RC221463



Coomassie blue staining of purified NGF protein (Cat# [TP321463]). The protein was produced from HEK293T cells transfected with NGF cDNA clone (Cat# RC221463) using MegaTran 2.0 (Cat# [TT210002]).