

Product datasheet for RC214281

OriGene Technologies, Inc.

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Neurotrophin 3 (NTF3) (NM_001102654) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Neurotrophin 3 (NTF3) (NM_001102654) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: Neurotrophin 3

Synonyms: HDNF; NGF-2; NGF2; NT-3; NT3

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >RC214281 representing NM_001102654
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC214281 representing NM_001102654

Red=Cloning site Green=Tags(s)

MVTFATILQVNKVMSILFYVIFLAYLRGIQGNNMDQRSLPEDSLNSLIIKLIQADILKNKLSKQMVDVKE NYQSTLPKAEAPREPERGGPAKSAFQPVIAMDTELLRQQRRYNSPRVLLSDSTPLEPPPLYLMEDYVGSP VVANRTSRRKRYAEHKSHRGEYSVCDSESLWVTDKSSAIDIRGHQVTVLGEIKTGNSPVKQYFYETRCKE ARPVKNGCRGIDDKHWNSQCKTSQTYVRALTSENNKLVGWRWIRIDTSCVCALSRKIGRT

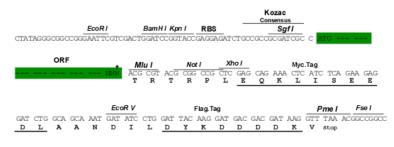
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6505 a11.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_001102654

ORF Size: 810 bp

OTI Disclaimer: 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: <u>NM 001102654.1</u>, <u>NP 001096124.1</u>

RefSeq Size: 1349 bp RefSeq ORF: 813 bp

 Locus ID:
 4908

 UniProt ID:
 P20783

 Cytogenetics:
 12p13.31

Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: MAPK signaling pathway, Neurotrophin signaling pathway

MW: 30.8 kDa

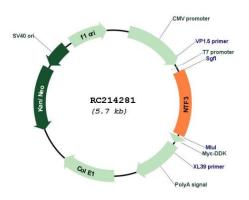
Gene Summary: The protein encoded by this gene is a member of the neurotrophin family, that controls

survival and differentiation of mammalian neurons. This protein is closely related to both nerve growth factor and brain-derived neurotrophic factor. It may be involved in the maintenance of the adult nervous system, and may affect development of neurons in the embryo when it is expressed in human placenta. NTF3-deficient mice generated by gene targeting display severe movement defects of the limbs. The mature peptide of this protein is identical in all mammals examined including human, pig, rat and mouse. [provided by RefSeq,

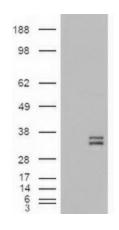
Jul 2008]



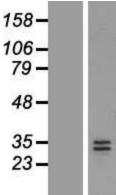
Product images:



Circular map for RC214281



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NTF3 (Cat# RC214281, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-NTF3(Cat# [TA500115]). Positive lysates [LY420181] (100ug) and [LC420181] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY420181]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214281 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).