

Product datasheet for **RC221890**

TrkB (NTRK2) (NM_001018066) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TrkB (NTRK2) (NM_001018066) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TrkB
Synonyms:	DEE58; EIEE58; GP145-TrkB; OBHD; trk-B; TRKB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC221890 representing NM_001018066
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCGTCCTGGATAAGGTGGCATGGACCCGCCATGGCGGGCTCTGGGGCTTCTGCTGGCTGGTTGTGG
 GCTTCTGGAGGGCGCTTTCGCCTGTCCCACGTCTGCAAATGCAGTGCCTCTCGGATCTGGTGCAGCGA
 CCCTTCTCCTGGCATCGTGGCATTTCAGAGATTGGAGCCTAACAGTGTAGATCCTGAGAACATCACCGAA
 ATTTTCATCGCAAACAGAAAAGGTTAGAAATCATCAACGAAGATGATGTTGAAGCTTATGTGGGACTGA
 GAAATCTGACAATTGTGGATTCTGGATTAATAATTTGTGGCTCATAAAGCATTCTGAAAAACAGCAACCT
 GCAGCACATCAATTTACCCGAAACAACTGACGAGTTTGTCTAGGAAACATTTCCGTCACCTTGACTTG
 TCTGAAGTATCCTGGTGGCAATCCATTTACATGCTCCTGTGACATTATGTGGATCAAGACTCTCCAAG
 AGGCTAAATCCAGTCCAGACACTCAGGATTTGACTGCCTGAATGAAAGCAGCAAGAATATCCCCTGGC
 AACCTGCAGATACCAATTGTGGTTTGCATCTGCAAATCTGGCCGCACCTAACCTCAGTGGAGGAA
 GAAAGTCTATCACATTATCCTGTAGTGTGGCAGGTGATCCGGTTCCTAATATGATTGGGATGTTGGTA
 ACCTGGTTTCCAACATATGAATGAAACAAGCCACACACAGGGCTCCTTAAGGATAACTAACATTTTCATC
 CGATGACAGTGGGAAGCAGATCTTGTGTGGCGAAAATCTTGTAGGAGAAGATCAAGATTCTGTCAAC
 CTCAGTGTGATTTTGCACCAACTATCACATTTCTCGAATCTCCAACCTCAGACCACCACTGGTGCATTC
 CATTCACTGTGAAAGGCAACCCAAACAGCGCTTCAAGTGTCTATAACGGGGCAATATTGAATGAGTC
 CAAATACATCTGTACTAAAATACATGTTACCAATCACACGGAGTACCACGGCTGCCTCCAGCTGGATAAT
 CCCACTCACATGAACAATGGGGACTACACTCTAATAGCCAAGAATGAGTATGGGAAGGATGAGAAACAGA
 TTTCTGCTCACTTCATGGGCTGGCTGGAATGACGATGGTGAACCCAAATTAATCTGATGTAATTTA
 TGAAGATTATGGAATGCAGCGAATGACATCGGGGACACCAGAACAGAAGTAATGAAATCCCTTCCACA
 GACGTCAGTATAAAACCGGTCGGGAACATCTCTCGGTCTATGCTGTGGTGGTATTGCGTCTGTGGTGG
 GATTTTGCCTTTTGGTAATGCTGTTTCTGCTTAAGTTGGCAAGACTCCAAGTTTGGCATGAAAGGCC
 AGCCTCCGTTATCAGCAATGATGATGACTCTGCCAGCCACTCCATCACATCTCCAATGGGAGTAACACT
 CCATCTTCTCGGAAGGTGGCCAGATGCTGTCATTATTGGAATGACCAAGATCCCTGTCATTGAAATC
 CCCAGTACTTTGGCATCACCAACAGTCAAGCCAGACACATGGCCAGAGGTTCCCCCAAGACCGC
 C

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC221890 representing NM_001018066
 Red=Cloning site Green=Tags(s)

MSSWIRWHGPAMARLWGFVWVGFWRAAFACPTSCCKSASRIWCSDPSPGIVAFPRLEPNVSDPENITE
 IFIANQKRLIINEDDVEAYVGLRNLTIIVDSGLKFVAHKAFKNSNLQHINFTRNKLTSLSRKHFRHLDL
 SELILVGNPFTCSCDIMWIKTLQEAKSSPDTQDLYCLNESSKNIPLANLQIPNGLPSANLAAPNLVTEE
 GKSITLSCSVAGDPVPMYWDVGNLVSKHMNETSHTQGLRITNISDDSGKQISCAENLVGEDQDSVN
 LTVHFAPTITFLESPTSDHHWCIPFTVKGNPKPALQWFYNGAILNESKYICTKIHTVNHTEYHGCLQLDN
 PTHMNGDYTLIAKNEYGKDEKQISAHFMGWPGIDDGANPNYPDIYEDYGTAAANDIGDTNRSNEIPST
 DVTDKTGREHLSVYAVVVIASVVGFCLLVMLFLLKLARHSKFGMKGPASVISNDDDSASPLHHISNGSNT
 PSSSEGGPDAVIIGMTKIPVIENPQYFGITNSQLKPDTPRGSFKTA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8066_b02.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001018066

ORF Size: 1611 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: [NM_001018066.3](#)

RefSeq Size: 8648 bp

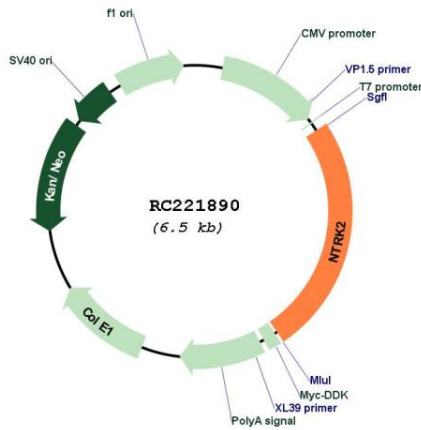
RefSeq ORF: 1614 bp

Locus ID: 4915

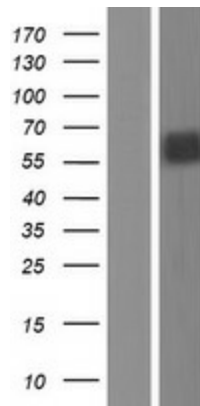
UniProt ID: [Q16620](#)

Cytogenetics:	9q21.33
Protein Families:	Druggable Genome, Protein Kinase, Transmembrane
Protein Pathways:	MAPK signaling pathway, Neurotrophin signaling pathway
MW:	59.17 kDa
Gene Summary:	This gene encodes a member of the neurotrophic tyrosine receptor kinase (NTRK) family. This kinase is a membrane-bound receptor that, upon neurotrophin binding, phosphorylates itself and members of the MAPK pathway. Signalling through this kinase leads to cell differentiation. Mutations in this gene have been associated with obesity and mood disorders. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2014]

Product images:



Circular map for RC221890



Western blot validation of overexpression lysate (Cat# [LY422717]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221890 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).