

Product datasheet for **RC221838**

TrkB (NTRK2) (NM_001018064) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TrkB (NTRK2) (NM_001018064) 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)



[View online »](#)

ORF Nucleotide
Sequence:

>RC221838 representing NM_001018064
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGTCGTCCTGGATAAGGTGGCATGGACCCGCCATGGCGCGGCTCTGGGGCTTCTGCTGGCTGGTTGTGG
GCTTCTGGAGGGCGCTTTCGCCTGTCCCACGTCTGCAAATGCAGTGCCTCTCGGATCTGGTGCAGCGA
CCCTTCTCCTGGCATCGTGGCATTTCAGAGATTGGAGCCTAACAGTGTAGATCCTGAGAACATCACCGAA
ATTTTCATCGCAAACAGAAAAGGTTAGAAATCATCAACGAAGATGATGTTGAAGCTTATGTGGGACTGA
GAAATCTGACAATTGTGGATTCTGGATTAATAATTTGTGGCTCATAAAGCATTCTGAAAAACAGCAACCT
GCAGCACATCAATTTACCCGAAACAACTGACGAGTTTGTCTAGGAAACATTTCCGTCACCTTGACTTG
TCTGAAGTATCCTGGTGGCAATCCATTTACATGCTCCTGTGACATTATGTGGATCAAGACTCTCCAAG
AGGCTAAATCCAGTCCAGACACTCAGGATTTGACTGCCTGAATGAAAGCAGCAAGAATATCCCCTGGC
AAACCTGCAGATACCCAATTGTGGTTTGCATCTGCAAATCTGGCCGCACCTAACCTCAGTGGAGGAA
GGAAAGTCTATCACATTATCCTGTAGTGTGGCAGGTGATCCGGTTCCTAATATGATTGGGATGTTGGTA
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CTCACTGTGCATTTTGCACCAACTATCACATTTCTCGAATCTCCAACCTCAGACCACCACTGGTGCATTC
CATTCACTGTGAAAGGCAACCCAAACAGCGCTTCAGTGGTCTATAACGGGGCAATATTGAATGAGTC
CAAATACATCTGTACTAAAATACATGTTACCAATCACACGGAGTACCACGGCTGCCTCCAGCTGGATAAT
CCCCTCACATGAACAATGGGGACTACACTCTAATAGCCAAGAATGAGTATGGGAAGGATGAGAAACAGA
TTTCTGCTCACTTCATGGGCTGGCTGGAATTGACGATGGTGAACCCAAATTAATCCTGATGTAATTTA
TGAAGATTATGGAAGTGCAGCGAATGACATCGGGGACACCAGAACAGAAGTAATGAAATCCCTTCCACA
GACGTCAGTATAAAACCGGTCGGGAACATCTCTCGGTCTATGCTGTGGTGGTATTGCGTCTGTGGTGG
GATTTTGCCTTTTGGTAATGCTGTTTCTGCTTAAGTTGGCAAGACTCCAAGTTTGGCATGAAAGGCC
AGCCTCCGTTATCAGCAATGATGATGACTCTGCCAGCCACTCCATCACATCTCCAATGGGAGTAACACT
CCATCTTCTTGGAAAGGTGGCCAGATGCTGTCATTATTGGAATGACCAAGATCCCTGTCATTGAAAATC
CCCAGTACTTTGGCATCACCAACAGTCAAGCCAGACACATTTGTTGAGCACATCAAGCGACATAA
CATTGTTCTGAAAAGGGAGCTAGGCGAAGGAGCCTTTGGAAAAGTGTTCCTAGCTGAATGCTATAACCTC
TGTCTGAGCAGGACAAGATCTTGGTGGCAGTGAAGACCTGAAGGATGCCAGTGAATGCACGCAAGG
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GCACACGGCCCTGATGCCGTGCTGATGGCTGAGGGCAACCCGCCACGGAAGTACGCGAGTGCAGATGC
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GCATCATGTACAGGAAATTCACGACGGAAGCGACGCTGGAGCCTGGGGTCTGTTGTGGGAGATTTT
CACCTATGGCAAACAGCCCTGGTACCAGCTGTCAAACAATGAGGTGATAGAGTATCACTCAGGGCCGA
GTCCTGCAGCGACCCCGCACGTGCCCCAGGAGGTGATGAGCTGATGCTGGGGTCTGGCAGCGAGAGC
CCCACATGAGGAAGAATCAAGGGCATCCATACCTCCTTCCAGAACTTGGCCAAGGCATCTCCGGTCTA
CCTGGACATTCTAGGC

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC221838 representing NM_001018064
Red=Cloning site Green=Tags(s)

MSSWIRWHGPAMARLWGFCWL VVGFWRAAFACPTSCCKCSASRIWCSDPSPGIVAFPRLEPN SVDPENITE
IFIANQKRL E I INEDDVEAYVGLRNL TI VDSGLKFVAHKAF LKNSNLQHINFRNKLTSLSRKHFRHLDL
SELILVGNPFTCSCDIMWIKTLQEAKSSPDTQDLYCLNESSKNIPLANLQIPNCGLPSANLAAPNL TVEE
GKSITLSCSVAGDPVPMYWDVGNL VSKHMNETSHTQGSLRITNISDDSGKQISCVAENLVGEDQDSVN
LTVHFAPTITFLESPTS DHHWCIPFTVKGNPKPALQWFYNGAILNESKYICTKIHV TNHTEYHGCLQLDN
PTHMNGDYTLIAKNEYGKDEKQISAHFMGWP GIDDGANPNYPDVIYEDYGTAAANDIGD TTNRSNEIPST
DVTDKTGREHLSVYAVVVIASVVGFCLLVMLFLLKLARHSKFGMKGPASVISNDDDSASPLHHISNGSNT
PSSSEGGPDAVIIGMTKIPVIENPQYFGITNSQLKPDTFVQHIKRHNIVLKREL GEGAFGKVFLAECYNL
CPEQDKILVAVKTLK DASNARKDFHREAELLTNLQHEHIVKFGVGVCEGDPLIMVFEYMKHGDLNKFLR
AHGPD AVLMAEGNPTEL TQSQMLHIAQQIAAGMVYLA SQHFVHRDLATRNL VGENLLVKIGDFGMSRD
VYSTDYR VGGHTMLPIR WMPPE SIMYRKFTTESDVWSLGVVLEIFTY GKQPWYQLSNNEVIECITQGR
VLQRPRTCPQEVYELMLGCWQREPHMRKN IKG IHTLLQNLAKASPVYLDILG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2780_b09.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:


ACCN: NM_001018064

ORF Size: 2466 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_001018064.3](#)

RefSeq Size: 5560 bp

RefSeq ORF: 2469 bp

Locus ID: 4915

UniProt ID: [Q16620](#)

Cytogenetics: 9q21.33

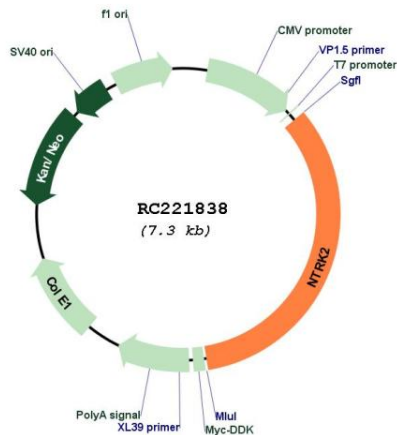
Protein Families: Druggable Genome, Protein Kinase, Transmembrane

Protein Pathways: MAPK signaling pathway, Neurotrophin signaling pathway

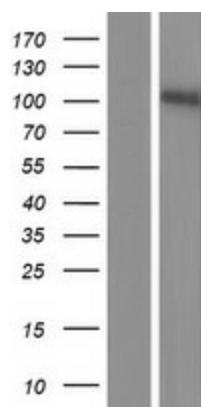
MW: 92 kDa

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 RC221838



Western blot validation of overexpression lysate (Cat# [LY422715]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221838 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).