

Product datasheet for SC302154

TrkB (NTRK2) (NM_001018066) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: TrkB (NTRK2) (NM_001018066) Human Untagged Clone

Tag: Tag Free Symbol: NTRK2

Synonyms: DEE58; EIEE58; GP145-TrkB; OBHD; trk-B; TRKB

Mammalian Cell Neomycin

Selection:

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

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn





Fully Sequenced ORF:

>SC302154 representing NM_001018066.

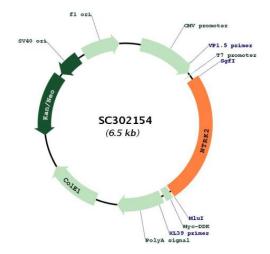
Blue=Insert sequence Red=Cloning site Green=Tag(s)

GGCTTCTGGAGGGCCGCTTTCGCCTGTCCCACGTCCTGCAAATGCAGTGCCTCTCGGATCTGGTGCAGC GACCCTTCTCCTGGCATCGTGGCATTTCCGAGATTGGAGCCTAACAGTGTAGATCCTGAGAACATCACC GAAATTTTCATCGCAAACCAGAAAAGGTTAGAAATCATCAACGAAGATGATGTTGAAGCTTATGTGGGA CTGAGAAATCTGACAATTGTGGATTCTGGATTAAAATTTGTGGCTCATAAAGCATTTCTGAAAAACAGC AACCTGCAGCACATCAATTTTACCCGAAACAAACTGACGAGTTTGTCTAGGAAACATTTCCGTCACCTT GACTTGTCTGAACTGATCCTGGTGGGCAATCCATTTACATGCTCCTGTGACATTATGTGGATCAAGACT CCCCTGGCAAACCTGCAGATACCCAATTGTGGTTTGCCATCTGCAAATCTGGCCGCACCTAACCTCACT GTGGAGGAAGGAAAGTCTATCACATTATCCTGTAGTGTGGCAGGTGATCCGGTTCCTAATATGTATTGG AACATTTCATCCGATGACAGTGGGAAGCAGATCTCTTGTGTGGCGGAAAATCTTGTAGGAGAAGATCAA GATTCTGTCAACCTCACTGTGCATTTTGCACCAACTATCACATTTCTCGAATCTCCAACCTCAGACCAC CACTGGTGCATTCCATTCACTGTGAAAGGCAACCCCAAACCAGCGCTTCAGTGGTTCTATAACGGGGCA ATATTGAATGAGTCCAAATACATCTGTACTAAAATACATGTTACCAATCACACGGAGTACCACGGCTGC CTCCAGCTGGATAATCCCACTCACATGAACAATGGGGACTACACTCTAATAGCCAAGAATGAGTATGGG AAGGATGAGAAACAGATTTCTGCTCACTTCATGGGCTGGCCTGGAATTGACGATGGTGCAAACCCAAAT TATCCTGATGTAATTTATGAAGATTATGGAACTGCAGCGAATGACATCGGGGACACCACGAACAGAAGT AATGAAATCCCTTCCACAGACGTCACTGATAAAACCGGTCGGGAACATCTCTCGGTCTATGCTGTGGTG GTGATTGCGTCTGTGGTGGGATTTTGCCTTTTGGTAATGCTGTTTCTGCTTAAGTTGGCAAGACACTCC AAGTTTGGCATGAAAGGCCCAGCCTCCGTTATCAGCAATGATGATGACTCTGCCAGCCCACTCCATCAC ATCTCCAATGGGAGTAACACTCCATCTTCTCGGAAGGTGGCCCAGATGCTGTCATTATTGGAATGACC AAGATCCCTGTCATTGAAAAATCCCCAGTACTTTGGCATCACCAACAGTCAGCTCAAGCCAGACACATGG CCCAGAGGTTCCCCCAAGACCGCCTGA

Restriction Sites:

Plasmid Map:

Sgfl-Mlul





TrkB (NTRK2) (NM_001018066) Human Untagged Clone - SC302154

ACCN: NM_001018066

Insert Size: 1614 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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 001018066.2</u>

 RefSeq Size:
 8292 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: 59.2 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] Transcript Variant: This variant (e) lacks an alternate in-frame exon in the central coding region, and also lacks several 3' exons but contains an alternate 3' terminal exon, and it thus differs in the 3' coding region and 3' UTR, compared to variant a. The encoded isoform (e, also known as TrkB-T-Shc) has a distinct C-terminus and is shorter than isoform a. The 5' UTR is incomplete due to a lack of 5'-complete transcript support for this variant, and because there is ambiguity in the 5' UTR splicing pattern. Variants e and n both encode the same isoform (e). Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.