

## Product datasheet for **RG205129**

### TrkB (NTRK2) (NM\_001007097) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TrkB (NTRK2) (NM_001007097) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TrkB
Synonyms:	DEE58; EIEE58; GP145-TrkB; OBHD; trk-B; TRKB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG205129 representing NM\_001007097  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCGTCCTGGATAAGGTGGCATGGACCCGCATGGCGGGCTCTGGGGCTTCTGCTGGCTGGTTGTGG  
 GCTTCTGGAGGGCGCTTTCGCCTGTCCACGTCTGCAAATGCAGTGCCTCTCGGATCTGGTGCAGCGA  
 CCCTTCTCCTGGCATCGTGGCATTTCAGAGATTGGAGCCTAACAGTGTAGATCCTGAGAACATCACCGAA  
 ATTTTCATCGAAACCAGAAAAGGTTAGAAATCATCAACGAAGATGATGTTGAAGCTTATGTGGACTGA  
 GAAATCTGACAATTGTGGATTCTGGATTAATAATTTGTGGCTCATAAAGCATTCTGAAAAACAGCAACCT  
 GCAGCACATCAATTTACCCGAAACAACTGACGAGTTTGTCTAGGAAACATTTCCGTCACCTTGACTTG  
 TCTGAAGTATCCTGGTGGCAATCCATTTACATGCTCCTGTGACATTATGTGGATCAAGACTCTCCAAG  
 AGGCTAAATCCAGTCCAGACACTCAGGATTTGACTGCCTGAATGAAAGCAGCAAGAATATCCCCTGGC  
 AACCTGCAGATACCAATTGTGGTTTGCATCTGCAAATCTGGCCGCACCTAACCTCAGTGGAGGAA  
 GGAAGTCTATCACATTATCCTGTAGTGTGGCAGGTGATCCGGTTCCTAATATGATTGGGATGTTGGTA  
 ACCTGGTTTTCAAACATATGAATGAAACAAGCCACACACAGGGCTCCTTAAGGATAACTAACATTTTCATC  
 CGATGACAGTGGGAAGCAGATCTCTTGTGTGGCGAAAATCTTGTAGGAGAAGATCAAGATTCTGTCAAC  
 CTCAGTGTGCAATTTGCACCAACTATCACATTTCTCGAATCTCCAACCTCAGACCACCACTGGTGCATTC  
 CATTCACTGTGAAAGGCAACCCAAACCAGCGCTTCAGTGGTCTATAACGGGGCAATATTGAATGAGTC  
 CAAATACATCTGTACTAAAATACATGTTACCAATCACACGGAGTACCACGGCTGCCTCCAGCTGGATAAT  
 CCCACTCACATGAACAATGGGGACTACACTCTAATAGCCAAGAATGAGTATGGGAAGGATGAGAAACAGA  
 TTTCTGCTCACTTCATGGGCTGGCCTGGAATTGACGATGGTGCACAAACCAAAATTAATCCTGGATGTAATTA  
 TGAAGATTATGGAATCGACGCAATGACATCGGGGACACCAACGAGAAGTAATGAAATCCCTTCCACA  
 GACGTCAGTATAAAACCGGTCGGGAACATCTCTCGGTCTATGCTGTGGTGGTATTGCGTCTGTGGTGG  
 GATTTTGCCTTTTGGTAATGCTGTTTCTGCTTAAGTTGGCAAGACACTCCAAGTTTGGCATGAAAGGTTT  
 TGTTTTGTTTCATAAGATCCCACTGGATGGG

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>RG205129 representing NM\_001007097  
 Red=Cloning site Green=Tags(s)

MSSWIRWHGPAMARLWGFVWRAAFACPTSCCKSASRIWCSDPSPGIVAFPRLEPNSVDPENITE  
 IFIANQKRLIINEDDVEAYVGLRNLTIIVDSGLKFVAHKAFKNSNLQHINFTRNKLTSLSRKHFRHLDL  
 SELILVGNPFTCSDIMWIKTLQEAKSSPDTQDLYCLNESSKNIPLANLQIPNCGLPSANLAAPNLVVEE  
 GKSTITLSCSVAGDPVPMYWDVGNLVSKHMNETSHTQGLRITNIISSDDSGKQISCVYENLVGEDQDSVN  
 LTVHFAPTITFLESPTSDHHCIPFTVKGNPKPALQWFYNGAILNESKYICTKIHVNTNHTYHGCLQLDN  
 PTHMNGDYTLIAKNEYGKDEKQISAHFMGWPIDDGANPNYPDVIYEDYGTAAANDIGDITNRSNEIPST  
 DVTDKTGREHLSVYAVVVIASVVGFCLLVMLFLLKLARHSKFGMKGFVLFHKIPLDG

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001007097

**ORF Size:** 1431 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\\_001007097.3](#)

**RefSeq Size:** 7111 bp

**RefSeq ORF:** 1434 bp

**Locus ID:** 4915

**UniProt ID:** [Q16620](#)

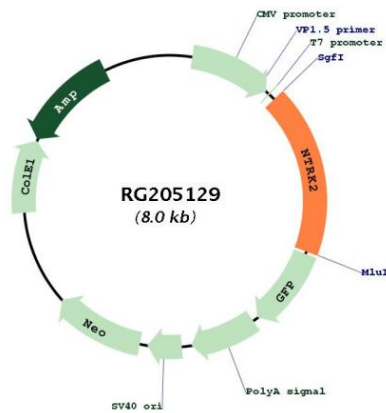
**Cytogenetics:** 9q21.33

**Protein Families:** Druggable Genome, Protein Kinase, Transmembrane

**Protein Pathways:** MAPK signaling pathway, Neurotrophin signaling pathway

**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 RG205129