

## Product datasheet for **RG219113**

### TrkC (NTRK3) (NM\_001012338) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TrkC (NTRK3) (NM_001012338) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TrkC
Synonyms:	gp145(trkC); GP145-TrkC; TRKC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG219113 representing NM\_001012338  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGATGTCTCTCTTTGCCAGCCAAGTGTAGTTTCTGGCGGATTTTCTGCTGGGAAGCGTCTGGCTGG  
 ACTATGTGGGCTCCGTGCTGGCTTGCCCTGCAAATTGTGTCTGCAGCAAGACTGAGATCAATTGCCGGCG  
 GCCGGACGATGGGAACCTCTCCCCCTCTGGAAGGGCAGGATTCAGGGAACAGCAATGGGAACGCCAGT  
 ATCAACATCACGGACATCTCAAGGAATACACTCCATACACATAGAGAAGTGGCGCAGTCTTACACGC  
 TCAACGCCGTGGACATGGAGCTTACACCGGACTTCAAAGCTGACCATCAAGAAGTCAAGACTTCCGGAG  
 CATTACAGCCAGAGCCTTTGCCAAGAACCCCATTTGCGTTATATAAACCTGTCAAGTAACCGGCTCACC  
 AACTCTCGTGGCAGCTTCCAGACGCTGAGTCTTCGGGAATTGCAGTTGGAGCAGAAGTCTTCAACT  
 GCAGCTGTGACATCCGCTGGATGCAGCTCTGGCAGGAGCAGGGGAGGCCAAGCTCAACAGCCAGAAGCT  
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 GAGATCAGCGTGAAGCCAGTCAACCTGACCGTACGAGAGGGTGACAATGCTGTTATCACTTGCAATGGCT  
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 TCTGAAGTGGACCAATGTTTCATGCCATCAACTGACGCTGGTGAATGTGACGAGTGGAGCAATGGCTTC  
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 CAACCCCAACCAACGCTGCACTGGCTGCACAATGGGCAGCCTCTGCGGGAGTCCAAGATCATCCATGTG  
 GAATACTACCAAGAGGGAGAGATTTCCGAGGGCTGCCTGCTTCAACAAGCCCAACCACTACAACAATG  
 GCAACTATACCTCATTGCCAAAACCCACTGGGCACAGCCAACAGACCATCAATGGCCACTTCTCCTCAA  
 GGAGCCCTTTCCAGAGAGCACGGATAAAGTATCTTTGTTGACGAAGTGAGTCCACACACCTCCTATCACT  
 GTGACCCACAACAGAGAAGACACTTTTGGGTATCCATAGCAGTTGGACTTGTGCTTTTGCCTGTG  
 TCCTGTTGGTGGTCTCTTCGTGATGATCAACAAATATGGTGCAGCGTCCAAATTTGGAATGAAGGGTCC  
 CGTGGCTGTGATCAGTGGTGGAGGAGTCAAGCCAGCCACTGCACCACATCAACCACGGCATCACCACG  
 CCCTCGTCACTGGATGCGGGGCCGACTGTGGTCAATGGCATGACTCGCATCCCTGTCATTGAGAACC  
 CCCAGTACTTCCGTCAGGGACACAAGTCCACAAGCCGGACACGTATGTGCAGCACATTAAGAGGAGAGA  
 CATCGTGTGAAGCGAGAAGTGGTGGAGGAGCCTTTGAAAAGTCTTCTGGCCGAGTGTACAACCTC  
 AGCCCGACCAAGGACAAGATGCTTGTGGCTGTGAAGGCCCTGAAGGATCCCACTGGCTGCCCGGAAGG  
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 TCCAGAGATGTCTACAGCACGGATTATTACAGGCTCTTAATCCATCTGGAAATGATTTTGTATATGGT  
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 CACTACAGAGAGTGTATGGAGCTTCGGGGTATCCTCTGGGAGATCTCACCTATGGAAAGCAGCCA  
 TGGTTCCAACCTCAAACACGGAGGTCATTGAGTGCATTACCCAAGGTCGTGTTTTGGAGCGGCCCGAG  
 TCTGCCCAAAGAGGTGTACGATGTCATGCTGGGGTGGTGGCAGAGGGAACCACAGCAGCGGTTGAACAT  
 CAAGGAGATCTACAAATCCTCCATGCTTTGGGAAGGCCACCCCAATCTACCTGGACATTTCTGGC

**ACGGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG219113 representing NM\_001012338  
 Red=Cloning site Green=Tags(s)

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MDVSLCPAKCSFWRIFLLGSVWLDYVGSVLACPANCVCSTEINCRPPDDGNLFPLLEGQDSGNSNGNAS
INITDISRNITSIHIENWRSLHTLNAVDMELYTGLQKLTIKNSGLRSIQPRAFAKNPHLRYLINLSSNRLT
TLQSWQLFQTLQSLRELQLEQNFFNCSCDIRWMLWQEQGEAKLNSQNLKYNADGSQLPLFRMNISQCDLP
EISVSHVNLTVREGDNAVITCNGSGSPLPDVDWIIVTGLQSIINTHTNLNWTNVHAINLTLVNVTSSENGF
TLTCIAENVVGMNASVALTVYYPPRVVSLPEELRLEHCIEFVVRGNPPPTLHWHNGQPLRESKIIHV
EYYQEGEISEGCLLFNKPTHYNNNGNYTLIAKNPLGTANQTINGHFLKEPFPESTDNFILFDEVSPPTPIT
VTHKPEEDTFGVSIAVGLAAAFACVLLVFLVMINKYGRRSKFGMKGPVAVISGEEDSASPLHHINHGITT
PSSLDAGPDTVIGMTRIPVIENPQYFRQGHNCHKPDTYVQHIKRRDIVLKRELGEFAGKVFVLAECYNL
SPTKDKMLVAVKALKDPTLAARKDFQREAE LLTNLQHEHIVKFGVCGDGDPLIMVFYMKHGDLNKF LR
AHGPDAMILVDGQPRQAKGELGLSQMLHIASQIASGMVYLASQHFVHRDLATRNCLVGANLLVKIGDFGM
SRDVYSTDYRLFNPSGNDFCIWCEVGGHTMLPIRWMPPESIMYRKFTTESDVWSFGVILWEIFTYKQP
WFQLSNTEVIEICITQGRVLERPRVCPKEVYDVMLGCWQREPQRLNIKEIYKILHALGKATPIYLDILG
  
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

Cloning Scheme:



ACCN: NM\_001012338

ORF Size: 2517 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\\_001012338.1](#), [NP\\_001012338.1](#)

**RefSeq Size:** 2860 bp

**RefSeq ORF:** 2520 bp

**Locus ID:** 4916

**UniProt ID:** [Q16288](#)

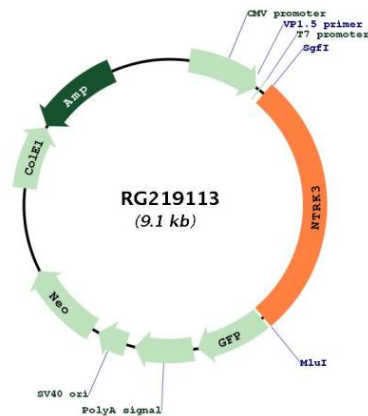
**Cytogenetics:** 15q25.3

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

**Protein Pathways:** 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 and may play a role in the development of proprioceptive neurons that sense body position. Mutations in this gene have been associated with medulloblastomas, secretory breast carcinomas and other cancers. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2011]

### Product images:



Circular map for RG219113