

## Product datasheet for **RC200293**

### TRK fused gene (TFG) (NM\_001007565) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TRK fused gene (TFG) (NM_001007565) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TRK fused gene
Synonyms:	HMSNP; SPG57; TF6; TRKT3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200293 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAACGGACAGTTGGATCTAAGTGGGAAGCTAATCATCAAAGCTCAACTGGGGAGGATATTCGGCGAA  
TTCCTATTCATAATGAAGATATTACTTATGATGAATTAGTGCTAATGATGCAACGAGTTTCAGAGGAAA  
ACTTCTGAGTAATGATGAAGTAAACAATAAAGTATAAAGATGAAGATGGAGATCTTATAACAATTTTGGAT  
AGTTCTGACCTTTCCTTTGCAATTCAGTGCAGTAGGATACTGAAACTGACATTATTTGTTAATGGCCAGC  
CAAGACCCCTTGAATCAAGTCAGGTGAAATATCTCCGTCGAGAAGTATGAGAAGTTCGAAATAAAGTGAA  
TCGTTTATTGGATAGCTTGGAAACCACCTGGAGAACCAGGACCTTCCACCAATATTCCTGAAAATGATACT  
GTGGATGGTAGGGAAGAAAAGTCTGCTTCTGATTCTTCTGGAAAACAGTCTACTCAGGTTATGGCAGCAA  
GTATGTCTGCTTTTGGATCCTTTAAAAACCAAGATGAAATCAATAAAAATGTTATGTCAGCGTTTGGCTT  
AACAGATGATCAGGTTTCAGGGCCACCCAGTGCTCCTGCAGAAGATCGTTCAGGAACACCCGACAGCATT  
GCTTCCTCCTCCTCAGCAGCTCACCCACCAGGCGTTCAGCCACAGCAGCCACCATATACAGGAGCTCAGA  
CTCAAGCAGGTCAGATTGAAGGTCAGATGTACCAACAGTACCAGCAACAGGCCGCTATGGTGCACAGCA  
GCCGCAGGCTCCACCTCAGCAGCCTCAACAGTATGGTATTCAGTATTCAGCAAGCTATAGTCAGCAGAT  
GGACCTCAACAACCTCAGCAGTTCAGGGATATGGCCAGCAACCAACTTCCAGGCACCAGCTCCTGCCT  
TTTCTGGTCAGCCTCAACAACCTGCCTGCTCAGCCGCCACAGCAGTACCAGGCGAGCAATTATCCTGCACA  
AACTTACACTGCCAAAATTCTCAGCCTACTAATTATACTGTGGCTCCTGCCTCTCAACCTGGAATGGCT  
CCAAGCCAACCTGGGCTATCAACCAAGACCAGGTTTTACTTCACTTCTGGAAGTACCATGACCCCTC  
CTCCAAGTGGCCTAATCCTTATGCGCGTAACCGTCTCCTTGGTCAGGGCTATACCAACCTGGACC  
TGGTTATCGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC200293 protein sequence  
Red=Cloning site Green=Tags(s)

MNGQLDL SGKLI IKAQLGEDIRRIPIHNEDITYDELVLMQRFVFRGKLLSNDEVTIKYKDEDGLITIFD  
SSDL SFAIQCSRILKLT L FVNGQPRPLESSQVKYLRRELIELRNKVNRLDLSLEPPGEPGPSTNIPENDT  
VDGREEKSASDSSGKQSTQVMAASMSAFDPLKNQDEINKNVMSAFGLTDDQVSGPPSAPAEDRSGTPDSI  
ASSSSAAHPPGVQPQQPPYTGAQTQAGQIEGQMYQQYQQQAGYGAQQPQAPPQQYGIQYSASYSQQT  
GPQQPQFQGYGQPTSQAPAPAFSGQPQLPAQPPQQYQASNYPAQTYTAQTSQPTNYTVAPASQPGMA  
PSQPGAYQPRPGFTSLPGSTMTPPPSGPNPYARNRPPFGQGYTQPGPGYR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6418\\_f09.zip](https://cdn.origene.com/chromatograms/mk6418_f09.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001007565

**ORF Size:** 1200 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_001007565.2](#), [NP\\_001007566.1](#)

**RefSeq Size:** 1841 bp

**RefSeq ORF:** 1203 bp

**Locus ID:** 10342

**UniProt ID:** [Q92734](#)

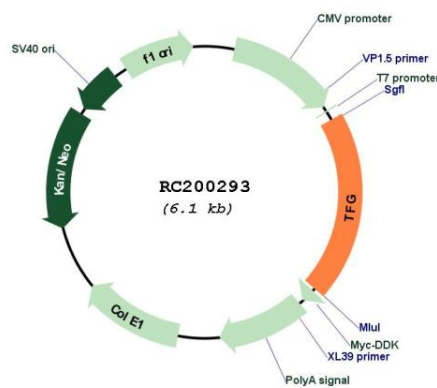
**Cytogenetics:** 3q12.2

**Protein Pathways:** Pathways in cancer, Thyroid cancer

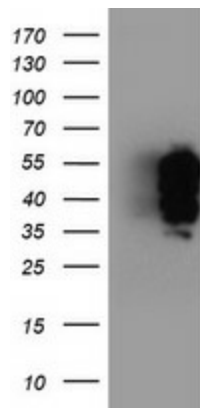
**MW:** 43.4 kDa

**Gene Summary:** There are several documented fusion oncoproteins encoded partially by this gene. This gene also participates in several oncogenic rearrangements resulting in anaplastic lymphoma and mixoid chondrosarcoma, and may play a role in the NF-kappaB pathway. Multiple transcript variants have been found for this gene. [provided by RefSeq, Sep 2010]

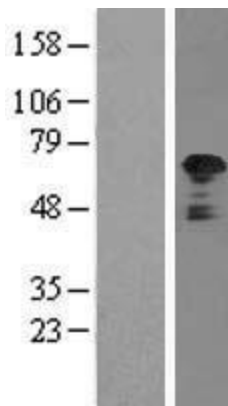
### Product images:



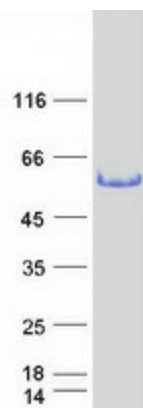
Circular map for RC200293



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TFG (Cat# RC200293, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TFG (Cat# [TA503858]). Positive lysates [LY423514] (100ug) and [LC423514] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY423514]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200293 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TFG protein (Cat# [TP300293]). The protein was produced from HEK293T cells transfected with TFG cDNA clone (Cat# RC200293) using MegaTran 2.0 (Cat# [TT210002]).