

Product datasheet for **RC220855**

TrkA (NTRK1) (NM_001007792) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TrkA (NTRK1) (NM_001007792) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TrkA
Synonyms:	MTC; p140-TrkA; TRK; Trk-A; TRK1; TRKA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC220855 representing NM_001007792
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGAAGGAGGCCGCCCTCATCTGCCTGGCACCCCTCTGTACCCCGATCTTGACGGTGAAGTCTGGGACA
CCATGCAGTTGCGGGCTGCTAGATCTCGGTGCACAACTTGTGGCAGCAAGCTACATCGAGAACCAGCA
GCATCTGCAGCATCTGGAGCTCCGTGATCTGAGGGCCTGGGGAGCTGAGAAACCTCACCATCGTGAAG
AGTGGTCTCCGTTTCGTGGCGCCAGATGCCTTCCATTTCACTCCTCGGCTCAGTCGCCTGAATCTCTCT
TCAACGCTCTGGAGTCTCTCTCGAAAACCTGTGACGGCCTCTCTTACAGGAACTGGTCTGTCCGG
GAACCCTCTGCACTGTTCTTGTGCCCTGCGCTGGCTACAGCGCTGGGAGGAGGAGGACTGGCGGAGTG
CCTGAACAGAAGCTGCAGTGTATGGGCAAGGGCCCTGGCCACATGCCAATGCCAGCTGTGGTGTGC
CCACGCTGAAGGTCCAGGTGCCAATGCCTCGGTGGATGTGGGGACGACGTGCTGCGGTGCCAGGT
GGAGGGCGGGGCTGGAGCAGGCCGGCTGGATCCTCACAGAGCTGGAGCAGTCAGCCACGGTGATGAAA
TCTGGGGGTCTGCCATCCCTGGGGCTGACCCTGGCCAATGTACCAAGTGACCTCAACAGGAAGAAGTGGA
CGTGCTGGGCAGAGAACGATGTGGGCGGGCAGAGGTCTCTGTTCAAGTCAACGTCCTCTCCCGGCCAG
TGTGCAGCTGCACACGGCGGTGGAGATGCACCACTGGTGCATCCCTTCTCTGTGGATGGGCAGCCGGCA
CCGTCTCTGCGCTGGCTCTTCAATGGCTCCGTGCTCAATGAGACCAGCTTCACTTCACTGAGTTCCTGG
AGCCGGCAGCCATGAGACCGTGCAGGACGGGTGTCTGCGCCTCAACCAGCCACCCACGTCACAAACGG
CAACTACACGCTGCTGGTGCACCCCTTCGGCCAGGCCCTCCGCTCCATCATGGCTGCCTTATGGAC
AACCTTTTCGAGTTCAACCCCGAGGACCCATCCCTGACATAACAGCACATCTGGAGACCCGGTGGAGA
AGAAGGACGAAACACCTTTTGGGGTCTCGGTGGCTGTGGCCTGGCCGTCTTTGCCTGCCTTCCCTTTC
TACGCTGCTCCTTGTGCTCAACAAATGTGGACGGAGAAACAAGTTTGGGATCAACCGCCCGCTGTGCTG
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GCTGAGTGCCACAACCTCCTGCCTGAGCAGGACAAGATGCTGGTGGCTGTCAAGGCACTGAAGGAGGCGT
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GCGCTTCTTCGGCGTCTGCACCGAGGGCCGCCCTGCTCATGGTCTTTGAGTATATGCGGCACGGGGAC
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GCCCTGGGTCTGGGGCAGCTGCTGGCCGTGGCTAGCCAGGTGCTGCGGGGATGGTGTACCTGGCGGG
TCTGCATTTTGTGCACCGGGACCTGGCCACACGCAACTGTCTAGTGGGCCAGGGACTGGTGGTCAAGATT
GGTGAATTTGGCATGAGCAGGGATATCTACAGCACCGACTATTACCGTGTGGGAGGCCGACCATGCTGC
CCATTCGCTGGATGCCGCCGAGAGCATCTGTACCGTAAAGTTCACCACCGAGAGCGACGTGTGGAGCTT
CGGCGTGGTGTCTGGGAGATCTTACCTACGGCAAGCAGCCCTGGTACCAGCTCTCAACACGGAGGCA
ATCGACTGCATCACGCAGGGACGTGAGTTGGAGCGGCCACGTGCCTGCCACCAGAGGTCTACGCCATCA
TGCGGGGCTGCTGGCAGCGGGAGCCCCAGCAACGCCACAGCATCAAGGATGTGCACGCCCCGGCTGCAAGC
CCTGGCCAGGCACCTCCTGTCTACCTGGATGTCTGGGC

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC220855 representing NM_001007792
Red=Cloning site Green=Tags(s)

MKEAALICLAPSVPPILTVKSWDTMQLRAARSRCTNLLAASYIENQHLQHLELRDLRGLGELRNLTIIVK
 SGLRFVAPDAFHFTPLRLSRLNLSFNALESLSWKTVOGLSLQELVLSGNPLHCSCALRWLQRWEEELGGV
 PEQKLQCHGQGPLAHMPNASCQVPTLKVQVFNASVDVGGDVLRLCQVEGRGLEQAGWILTELEQSATVMK
 SGGLPSLGLTLANVTSDLNRKNVTCWAENDVGRAEVSVQVNVSPASVQLHTAVEMHHWCIPFSDVGQPA
 PSLRWLFNGSVLNETSFIFFTEFLEPAANETVRHGCLRLNQPTHVNNNGNYLLAANPFQASASIMAAFMD
 NPFEFNPEDPIPDTNSTSGDPVEKKDETPFGVSVAVGLAVFACLFLLSTLLLVLNKCGRRNKFGINRPAVL
 APEDGLAMSLHFMTLGGSSLSPTGKGSGLQGHIENPQYFSDACVHHIKRRDIVLKWELGEGAFGKVFL
 AECHNLLPEQDKMLVAVKALKEASESARQDFQREAEELLTMLQHQHIVRFFGVCTEGRPLLMVFEYMRHGD
 LNRFLRSHGPDAKLLAGGEDVAPGPLGLGQLLAVASQVAAGMVYLAGLHFVHRDLATRNCLVQGLVVKI
 GDFGMSRDIYSTDYRVGGRTMLPIRWMPPELILYRKFTTESDVWSFGVVLWEIFTYQKQPWYQLSNTEA
 IDCITQGRELERPRACPPEVYAIMRGCWQREPQQRHSIKDVHARLQALAQAPPVYLDVLG

TRTRPLEQKLISEEDLANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6163_g12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001007792

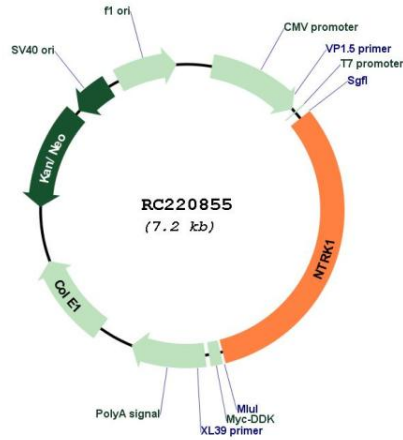
ORF Size: 2280 bp

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](#)

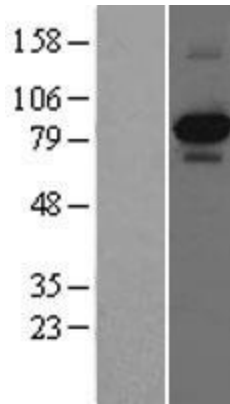
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<ol style="list-style-type: none">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_001007792.1</u> , <u>NP_001007793.1</u>
RefSeq Size:	2581 bp
RefSeq ORF:	2283 bp
Locus ID:	4914
UniProt ID:	<u>P04629</u>
Cytogenetics:	1q23.1
Protein Families:	Druggable Genome, Protein Kinase, Transmembrane
Protein Pathways:	Apoptosis, Endocytosis, MAPK signaling pathway, Neurotrophin signaling pathway, Pathways in cancer, Thyroid cancer
MW:	83.8 kDa
Gene Summary:	This gene encodes a member of the neurotrophic tyrosine kinase receptor (NTRK) family. This kinase is a membrane-bound receptor that, upon neurotrophin binding, phosphorylates itself and members of the MAPK pathway. The presence of this kinase leads to cell differentiation and may play a role in specifying sensory neuron subtypes. Mutations in this gene have been associated with congenital insensitivity to pain, anhidrosis, self-mutilating behavior, cognitive disability and cancer. Alternate transcriptional splice variants of this gene have been found, but only three have been characterized to date. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC220855



Western blot validation of overexpression lysate (Cat# [LY400383]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220855 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).