

Product datasheet for **SC301251**

TrkA (NTRK1) (NM_001007792) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TrkA (NTRK1) (NM_001007792) Human Untagged Clone
Tag:	Tag Free
Symbol:	TrkA
Synonyms:	MTC; p140-TrkA; TRK; Trk-A; TRK1; TRKA
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene sequence for NM_001007792 edited
GCATGAAGGAGGCCGCCCTCATCTGCCTGGCACCCCTCTGTACCCCGATCTTGACGGTGA
AGTCTGGGACACCATGCAGTTGCGGGCTGCTAGATCTCGGTGCACAACTTGTTGGCAG
CAAGCTACATCGAGAACCAGCAGCATCTGCAGCATCTGGAGCTCCGTGATCTGAGGGGCC
TGGGGGAGCTGAGAACTCACCATCGTGAAGAGTGGTCTCCGTTTCGTGGGCCAGATG
CCTTCCATTTCACTCCTCGGCTCAGTCGCCTGAATCTCTCCTTCAACGCTCTGGAGTCTC
TCTCTGGAAAACGTGTGCAAGGCCCTCCTTACAGGAACCTGGTCTGTGCGGGAACCCCTC
TGCACTGTTCTTGTGCCCTGCGCTGGCTACAGCGCTGGGAGGAGGAGGACTGGGCGGAG
TGCTGAACAGAAGCTGCAGTGCATGGCAAGGGCCCTGGCCACATGCCCAATGCCA
GCTGTGGTGTGCCACGCTGAAGGTCCAGGTGCCCAATGCCTCGGTGGATGTGGGGGACG
ACGTGCTGCTGCGGTGCCAGGTGGAGGGCGGGGCTGGAGCAGGCCGGCTGGATCCTCA
CAGAGCTGGAGCAGTCAGCCACGGTGAATACTGGGGTCTGCCATCCTGGGGTGA
CCCTGGCAATGTACCAGTGACCTCAACAGGAAGAAGCTGACGTGCTGGGCAGAGAACG
ATGTGGGCCGGGAGAGTCTGTTCAGGTCAACGTCTCCTTCCCGCCAGTGTGCAGC
TGCACACGGCGGTGGAGATGCACCACTGGTGCATCCCCTTCTCTGTGGATGGGCAGCCGG
CACCCTCTCTGCGCTGGCTCTTCAATGGTCCGTGCTCAATGAGACCAGCTTCATTTCA
CTGAGTTCCTGGAGCCGGCAGCCAATGAGACCGTGCAGCACGGGTGTCTGCGCCTCAACC
AGCCACCCACGTCAACAACGGCAACTACACGCTGCTGGCTGCCAACCCCTTCGGCCAGG
CCTCCGCTCCATCATGGCTGCCCTTCAATGGACAACCCCTTCGAGTTCAACCCCGAGGACC
CCATCCCTGACACTAACAGCACATCTGGAGACCCGGTGGAGAAGAAGGACGAAACACCTT
TTGGGGTCTCGGTGGCTGTGGGCTGGCCGTCTTGCCTGCCTCTTCTTCTACGCTGC
TGCTTGTGCTCAACAAATGTGGACGGAGAACAAGTTGGGATCAACCGCCGGCTGTGC
TGGCTCCAGAGGATGGGCTGGCCATGTCCTGCATTTCAATGACATTGGGTGGCAGTCCC
TGTCCCCACCGAGGGCAAGGCTCTGGGCTCCAAGGCCACATCATCGAGAACCACAAT
ACTTCAGTGATGCTGTGTTACCCACATCAAGCGCCGGGACATCGTGTCAAGTGGGAGC
TGGGGGAGGGCGCCTTTGGGAAGGTCTTCTTGTGCTGAGTGCCACAACCTCCTGCCTGAGC
AGGACAAGATGCTGGTGGCTGTCAAGGCACTGAAGGAGGCGTCCGAGAGTGTGCGCAGG
ACTTCCAGCGTGAGGCTGAGCTGCTCACCATGCTGCAGCACCAGCACATCGTGCCTTCT
TCGGCGTCTGCACCGAGGGCCGCCCTGCTCATGGTCTTTGAGTATATGCGGCACGGGG
ACCTCAACCGCTTCTCCGATCCCATGGACCTGATGCCAAGCTGCTGGCTGGTGGGGAGG
ATGTGGTCCAGGCCCTGGGCTGGGGCAGCTGCTGGCCGTGGCTAGCCAGGTCGCTG
CGGGGATGGTGTACCTGGCGGGTCTGCATTTTGTGCACCGGGACCTGGCCACACGCAACT
GTCTAGTGGGCCAGGACTGGTGGTCAAGATTGGTGATTTTGGCATGAGCAGGGATATCT
ACAGCACCAGCTATTACCGTGTGGGAGGCCGACCATGCTGCCCATTCGCTGGATGCCGC
CCGAGAGCATCCTGTACCGTAAGTTCACCACCGAGAGCGACGTGTGGAGCTTCGGCGTGG
TGCTCTGGGAGATCTTACCTACGGCAAGCAGCCCTGGTACCAGCTCTCCAACACGGAGG
CAATCGACTGCATCACGAGGGACGTGAGTTGGAGCGGCCACGTGCCTGCCACCCAGAGG
TCTACGCCATCATGCGGGGCTGCTGGCAGCGGGAGCCCCAGCAACGCCACAGCATCAAGG
ATGTGCACGCCCCGGCTGCAAGCCCTGGCCAGGCACCTCCTGTCTACCTGGATGTCCTGG
GCTAGGGGGCCGGCCAGGGGCTGGGAGTGGTTAGCCGGAATACTGGGGCCTGCCCTCAG
CATCCCCATAGCTCCCAAGCAGCCCCAGGGTATCTTAAAGTATCTAATTCACCCCTCAGC
ATGTGGGAAGGGACAGGTGGGGGCTGGGAGTAGAGGATGTTCTGCTTCTTAGGCAAGG
TCCCGTATAGCAATTATATTTATATCCCTTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAA
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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_001007792 unedited</p> <pre>GGTCAAAATTTGTATACGACTCATATAGGGCGGCCGCGATTTCGCATGAAGAGGCCGCCCT CATCTGCCTGGCACCCCTCTGTACCCCGATCTTGACGGTGAAGTCTGGGACACCATGCA GTTGCGGGCTGTAGATCTCGGTGCACAACTTGTGGCAGCAAGCTACATCGAGAACCA GCAGCATCTGCAGCATCTGGAGTCCGTGATCTGAGGGCCTGGGGAGCTGAGAAACCT CACCATCGTGAAGAGTGGTCTCCGTTTCGTGGCCAGATGCCTTCCATTTCACTCCTCG GCTCAGTCGCCTGAATCTCTCTTCAACGCTCTGGAGTCTCTCTCTGGAAAACTGTGCA GGCCTCTCCTTACAGGAAGTGGTCTGTGCGGGAACCCCTGCACTGTTCTTGTGCCCT GCGCTGGCTACAGCGCTGGGAGGAGGAGGACTGGGCGGAGTGCCTGAACAGAAGCTGCA GTGTCATGGGCAAGGGCCCTGGCCACATGCCAATGCCAGCTGTGGTGTGCCACGCT GAAGGTCCAGGTGCCAATGCCTCGGTGGATGTGGGGACGACGTGCTGCTGCGGTGCCA GGTGGAGGGCGGGCCCTGGAGCANGCCGGCTGGATCCTCACAGAGCTGGAGCAGTCAGC CACGGTGTAAATCTGGNGGTCTGCCATCCCTGGGGCTGACCCTGGCCATGTCACCAG TGACCTCAACAGGAAGAAGCTGACGTGCTGGGCAGAGAACGATGTGGCCGGGCAGAGGT CTCTGGTCAGGTCAACGTCTCCTTCCGGCCAGTGTGCAGCTGCACACGCCGGTGGAGAT GCACCACTGN</pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_001007792 unedited</p> <pre>CGCCCACTGTAGATGCGACTTNCAGNNCCAGANANAGCACTGGGGTAGGGTCACAGGGAT GCCACCCGGGATCTGTTCAAGAAACAGCTATGACCGCGGCCGAATCTAGAGTCGAGGGA TACTCTAGAGCGGCCCTT TTTTTTTTTTTTTCAAAGGGAAAAAATAATAATTGTTTTGACGGGACTTTGCATAAAAA AGCAGGAACATTTTTATTCCAAGCCCACTTTTCTTTCCAAAATGCTGAGGGGAAAT TAAATACTTTAAAATCACCTGGGGCTGCTGGAACCTATGGGGGATGTTGAGGGCAGGCC CAATTTTTCCGGTTAACCATTCCAAGCCCTTGGGCCGGCCCTTAGCCCAGGACATTCAG TTAAACAGGAGTTGCCTGGGCCAGGTTTGCAACCGGGCTTGAACATCTTTAATGCTGAG GCTTTGTTGGGGCTCCCGTTGCCAGCAACCCGAATGATGGCGTAAACTTTTGGTGGCA GGCACTTGGCCATTCAAATAACTTCTTGGGTGATGCAATAAATGCCTCCGTGTTGAG AAAGTGGTACAAGGGCTGTTTGCCTAAGTAAAAATTTCCAAAATCACCCCAAAATC TCCACCTTTCTTCTCGGTGGGAACTTACGGTAAAGGAATCTTTAGCGGGCTTCCAAC AAAATGGACAAAATGGTGCAGCCCCACACGGAAAATAGCCGGCCCTAAAAATTTCCCT GTTTTATGCCAAAATAACCAATTTTAAAACCATTCCTGGCCACATAAAAAGTTGGT TTTGGGCCACG</pre>
Restriction Sites:	Please inquire
ACCN:	NM_001007792
Insert Size:	2600 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:	The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
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:	NM_001007792.1 , NP_001007793.1
RefSeq Size:	2581 bp
RefSeq ORF:	2283 bp
Locus ID:	4914
UniProt ID:	P04629
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
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (3) utilizes alternate 5' exons and lacks an internal in-frame exon, compared to variant 2. Translation initiation occurs at an upstream AUG, resulting in a shorter isoform (3) with a unique N-terminus compared to isoform 2.</p>