

Product datasheet for **RR203182**

Trpa1 (NM_207608) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Trpa1 (NM_207608) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Trpa1
Synonyms:	Anktm1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RR203182 representing NM_207608 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGCGCAGCTTGAGGAGGTTCTGCGCCCCGAGGAAAGAAAGGAGGTCCAGGGCGTCGTCTATCGCG
CGGTGGGAAAGACATGGACTGCTCCAAGGAATCCTTTAAGGTGGACATTGAAGGAGATATGTGCAGATT
AGAAGCCTTCATCAAGAACCGAAGAAAATAAGCAAGTACGAGGATGAAAATCTCTGTCTTCTGCATCAC
GCCGCAGCCGAAGGTCAAGTTGAACTGATGCAATTGATCATCAATGGCTCTTCTGTGAAGCGCTGAATG
TAATGGATGATTATGAAATACCCCACTACATTGGGCTGCAGAAAAAATCAAGTTGAAAGTGTGAAGTT
TCTTCTCAGCCAAGGAGCAAATCCAACCTCCGAAATAGAAACATGATGGCACCCCTTCACATAGCTGTA
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AGAATGGGAACACAGCTTTGATGTCCACGTGTGCCAAAGACAACAGTGAAGCTTTGCAAATTTTGTAGA
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ACTGCTTCTGCATCCTGGAATATTGTGAATTTGCTCCTCTCTAAAGGTGCCAAAGTAGACATAAAAGATC
ATCTTGGGCGTAACTTTTACATTTGACTGTGCAGCAGCCTTATGGGCTAAGGAATTTGCGGCCTGAGTT
TTTGCAGATGCAACACATCAAGGAGCTGGTATGGATGAGGACAATGATGGATGTACGCCTCTCCATTAT
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GCAAGACATCAGCGACACAAGGCTTTTGAATGAAGGGGATCTCCATGGAATGACCCCTCTCCATCTGGCA



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GCAAAGAATGGACATGATAAAGTCGTTCAACTTCTTCTCAAGAAAGGGCCTTGTTTCTTAGTGACCACA
ATGGCTGGACTGCTTTCATCATGCGTCCATGGGTGGCTACACTCAGACCATGAAGGTCATTCTTGACAC
TAACTTGAAGTGCACAGACCGGCTAGATGAAGAAGGGAACACAGCACTTCACTTTGCAGCACGGGAAGGC
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TTCTGCATATTGCACTGCACAATAAGCGCAAGGAAGTGGTTCTCACACCATCAGGAGTAAAAGATGGGA
TGAGTGTCTTCAAGTTTTACTCATGATTCTCCAAGCAATCGCTGTCCAATCATGGAAATGGTGGAAATC
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ACTACCATATTGAGTATAATTTCAAGTATCTCCAATGCCATTATCCATGACCAAAAAAGTAACCCCCAC
CCAGGATGTGATCTATGAGCCTCTTACAATCCTCAATGTCATGGTCCAACATAAACCAGCATAGAGCTCCTC
AACCACCCTGTGTAGGGAATACTTACTTATGAAATGGTGTGCCTATGGCTCAGAGCTCATATGATGA
ACCTAGGATCTTATTGTCTTGGTCTCATACCCATGACCCTTCTTGTGTCAAAATACAGCCTGGAATGGC
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TGGCCTCAGCTTTTACGTCCCTGAATTTCCAAGATGCCTTCAGCACCCCGTTGCTTTCCTTAATCCAG
ACGTTCCAGTATGATGCTGGGAGACATCAATTACCGAGATGCTTTCCTAGAACCGTTGTTCCAGGAATGAGT
TGGCATAACCCGGTCCACCTTTGGGCAGCTTATTGCCTTCAATGTTTCGTCCCAATTGTTCTCATGAA
CCTACTGATTGGTTTGGCAGTTGGGGACATTGCTGAGGTCCAGAAGCATGCATCATTAAAGAGGATTGCT
ATGCAGGTGGAAGTGCATACCAACTTAGAAAAAAGCTACCATTCTGGTACTTGGCAAAGTGGATCAGA
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TATGCAAAGAAACAGACAAGAAGCACCAAAACATTGACACATGTTTGGAAATGGAAATACTGAAACAGAAA
TACCGGCTGAAGGACCTCACTTCTTTTGGAAAAGCAGCAGGCTCATCAAACATCATCCTCAAAGA
TGGAGATCATCTCGGAGACAGAAGATGAAGATAACCATTGCTCTTCCAAGACAGGTTCAAAAAGGAACG
GCTAGAACAAATGCATAGCAAATGGAATTTTGTCTTAAACGCAGTTAAGACTAAAACACATTGTTCTATT
AGCCACCCAGACATCAGCCACCCAGACATC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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 Size: 3378 bp

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Locus ID: 312896

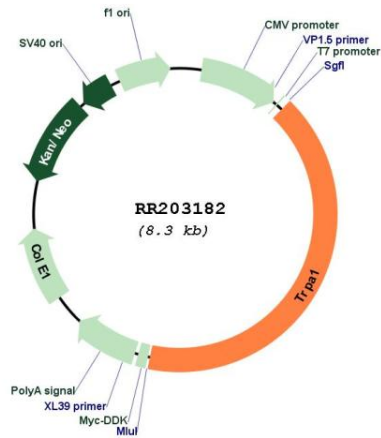
UniProt ID: [Q6RI86](#)

Cytogenetics: 5q11

MW: 128.6 kDa

Gene Summary: Receptor-activated non-selective cation channel involved in detection of pain and possibly also in cold perception and inner ear function. Has a central role in the pain response to endogenous inflammatory mediators and to a diverse array of volatile irritants, such as mustard oil, cinnamaldehyde, garlic and acrolein, an irritant from tears gas and vehicle exhaust fumes. Acts also as an ionotropic cannabinoid receptor by being activated by delta(9)-tetrahydrocannabinol (THC), the psychoactive component of marijuana (PubMed:14712238). Is also activated by menthol (in vitro) (By similarity). May be a component for the mechanosensitive transduction channel of hair cells in inner ear, thereby participating in the perception of sounds. Probably operated by a phosphatidylinositol second messenger system (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR203182