

Product datasheet for RN203182

Trpa1 (NM_207608) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Trpa1 (NM_207608) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Trpa1
Synonyms:	Anktm1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>RN203182 representing NM_207608 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGCGCAGCTTGAGGAGGGTTCTGCGCCCCGAGGAAAGAAAGGAGGTCCAGGGCGTCGTCTATCGCG
CGGTGGGAAAGACATGGACTGCTCCAAGGAATCCTTTAAGGTGGACATTGAAGGAGATATGTGCAGATT
AGAAGCCTTCATCAAGAACCGAAGAAAATAAGCAAGTACGAGGATGAAAATCTCTGTCTTCTGCATCAC
GCCGCAGCCGAAGGTCAAGTTGAACTGATGCAATTGATCATCAATGGCTTCTCTGTGAAGCGCTGAATG
TAATGGATGATTATGAAATACCCCACTACATTGGGCTGCAGAAAAAATCAAGTTGAAAGTGTGAAGTT
TCTTCTCAGCCAAGGAGCAAATCCAACCTCCGAAATAGAAACATGATGGCACCCCTTCACATAGCTGTA
CAGGGCATGTACAACGAAGTATCAAGGCTTGACCGAGCACAAGGCCACTAACATCAATTTAGAAGGAG
AGAATGGGAACACAGCTTTGATGTCCACGTGTGCCAAAGACAACAGTGAAGCTTTGCAAATTTTGTAGA
AAAAGGAGCTAAGCTGTGTAATCAAATAAATGGGGAGACTACCTGTGCACCAGGCAGCATTTCAGGT
GCCAAAAGATGCATGGAATTAATCTTAGCATATGGTGAAGAACCGGCTATAGCCGGGAGGCTCACATTA
ACTTTGTGAATCATAAGAAAGCCAGCCCTCTCCACCTCGCAGTTCAGAGCGGCGACTTGGACATGATTA
GATGTGCCTGGACAGCGGTGCACACATCGACATGATGGAGAATGCCAAATGCATGGCCCTCCATTTTGT
GCAACCCAGGGAGCCACTGACATCGTTAAACTCATGATCTCATCTATACTGGAAGCAGCGATATCGTGA
ATGCAGTCGATGGCAATCAGGAGACCTGCTTCACAGAGCCTCATTATTTGATCATCATGACCTGGCAGA
CTACCTAATTTAGTGGGAGCAGACATCAACAGCACTGATTCTGAAGGACGCTCTCCACTTATTTAGCA
ACTGCTTCTGCATCCTGGAATATTGTGAATTTGCTCCTCTCTAAAGGTGCCAAAGTAGACATAAAAGATC
ATCTTGGGCGTAACTTTTACATTTGACTGTGCAGCAGCCTTATGGGCTAAGGAATTTGCGGCCTGAGTT
TTTGCAGATGCAACACATCAAGGAGCTGGTATGGATGAGGACAATGATGGATGTACGCCTCTCCATTAT
GCTTGTAGGCAGGGGCCCTGTCTGTAAATAACCTCCTCAGGTTCAATGTGTCGGTTCATTCCAAAA
GCAAAGATAAGAAGTCTCCCTGCACTTGGCCAGCTATGGGCGCATCAATACATGTCAGAGGCTTCT
GCAAGACATCAGCGACACAAGGCTTTTGAATGAAGGGGATCTCCATGGAATGACCCCTCTCCATCTGGCA



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GCAAAGAATGGACATGATAAAGTCGTTCAACTTCTTCTCAAGAAAGGGCCTTGTTCCTTAGTGACCACA
 ATGGCTGGACTGCTTTCATCATGCGTCCATGGGTGGCTACACTCAGACCATGAAGGTCATTCTTGACAC
 TAACCTGAAGTGCACAGACCCGGCTAGATGAAGAAGGGAACACAGCACTTCACTTTGCAGCACGGGAAGGC
 CATGCAAAGGCTGTTGCGATGCTTTTGAGCTACAATGCTGACATCCTCCTGAACAAGAAGCAAGCTTCT
 TTCTGCATATTGCACTGCACAATAAGCGCAAGGAAGTGGTTCTCACACCATCAGGAGTAAAAGATGGGA
 TGAGTGTCTTCAAGTTTTACTCATGATTCTCCAAGCAATCGCTGTCCAATCATGGAAATGGTGAATAC
 TCCTCCGAGTGCATGAAAGTTCTTCTAGATTTCTGCATGATACCTCCACAGAAGACAAGTCTGCCCAAG
 ACTACCATATTGAGTATAATTTCAAGTATCTCAATGCCATTATCCATGACCAAAAAAGTAACCCCCAC
 CCAGGATGTGATCTATGAGCCTCTTACAATCCTCAATGTCATGGTCCAACATAACCCGATAGAGCTCCTC
 AACCCCTGTGTAGGGAATACTTACTTATGAAATGGTGTGCCTATGGCTCAGAGCTCATATGATGA
 ACCTAGGATCTTATTGCTTGGTCTCATACCCATGACCCTTCTTGTGTCAAAATACAGCCTGGAATGGC
 CTTCAATTCTACTGGAATAATCAATGAACTATTAGTACTCATGAGGAAAGAATAAACACTCTGAATTGC
 TTTCCATAAAAATATGTATGATTCTAGTTTTTTATCAAGTATATTTGGATATTGCAAAGAAGTGGTCC
 AAATTTTCCAACAGAAAAGGAAGTACTTTCTGGACTACAACAATGCTCTGGAGTGGGTCTATACACCAC
 CAGTATGATCTTGTGTTGCCCTTATTCTCGACATCCCGCGTATATGCAGTGGCAATGTGGAGCGATA
 GCAATATTCTTCTACTGGATGAACTTCTACTATATCTTCAAAGTTTGAGAAGTGTGGCATTTCATTG
 TTATGTTGGAGGTGATTTTTAAACATTGCTGAGATCGACGGGAGTGTATCTTCTGCTATTGGCTTT
 TGGCCTCAGCTTTTACGTCCTCCTGAATTTCCAAGATGCCTTCAGCACCCCGTTGCTTTCCTTAATCCAG
 ACGTTCAGTATGATGCTGGGAGACATCAATTACCGAGATGCTTTCCTAGAACCGTTGTTCCAGGAATGAGT
 TGGCATACCCGGTCTCACCTTTGGGCAGCTTATTGCCTTCACAATGTTCTGTCCTCAATGTTCTCATGAA
 CCTACTGATTGGTTTGGCAGTTGGGACATTGCTGAGGTCCAGAAGCATGCATCATTAAAGAGGATTGCT
 ATGCAGGTGGAAGTGCATACCAACTTAGAAAAAAGCTACCATTCTGGTACTTGGCAAAGTGGATCAGA
 GGTCCACCATCGTGTATCCGAATAGACCCAGGCAGGATGCTGCGGTTTTTTTCACTTACTTTCTTAG
 TATGCAAGAAACACGACAAGAAGCACCAAAACATTGACACATGTTTGGAAATGGAATACTGAAACAGAAA
 TACCGGCTGAAGGACCTCACTTCTTTTGGAAAAGCAGCAGGCTCATCAAACATCATATCCAAAAGA
 TGGAGATCATCTCGGAGACAGAAGATGAAGATAACCATTGCTCTTTCCAAGACAGGTTCAAAAAGGAACG
 GCTAGAACAAATGCATAGCAAATGGAATTTGTCTTAAACGCAGTTAAGACTAAAACACATTGTTCTATT
 AGCCACCCAGACATCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAAGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja1729_d02.zip

Restriction Sites: SgfI-MluI

ACCN: NM_207608

Insert Size: 3378 bp

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](#)

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_207608.1</u> , <u>NP_997491.1</u>
RefSeq Size:	3378 bp
RefSeq ORF:	3378 bp
Locus ID:	312896
UniProt ID:	<u>Q6RI86</u>
Cytogenetics:	5q11
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]