

Product datasheet for **MC224988**

Trpm7 (NM_021450) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Trpm7 (NM_021450) Mouse Untagged Clone
Tag: Tag Free
Symbol: Trpm7
Synonyms: 2310022G15Rik; 4833414K03Rik; 5033407O22Rik; CHAK; CHAK1; Ltrp7; LTrpC-7; Ltrpc7
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC224988 representing NM_021450
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCCCAGAAATCCTGGATAGAGAGCACTTTGACCAAGAGGGAGTGTATATATTATACCAAGCTCCA
 AAGACCCTCACAGATGTCTCCAGGATGTCAGATTTGTCAGCAACTTGTGAGATGTTCTGTGGTCTGTT
 GGTCAAGCAACATGCATGCTTTACTGCAAGTCTTGCCATGAAATACTCAGATGTGAAATGGGTGAACAC
 TTTAACAGGCAATAGAAGAATGGTCTGTGGAAAAGCACACGGAGCAGAGCCCAACAGATGCTTATGGAG
 TCATCAATTTTCAAGGGGTTCTCATTCTACAGAGCTAAGTATGTGAGACTATCATATGATACCAAAC
 TGAAATCATTCTGCAACTTCTGCTTAAAGAATGGCAATGGAGTTACCCAACTGTTATTTCTGTACAT
 GGAGGCATGCAGAAGTTTGAAGTTCATCCAAGAATCAAGCAGTTGCTTGGAAAGGGTCTTATTAAGCTG
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 AATTGAATGTTCTGAATAATCTACACTCCATTTTCATCTTGGTGGATGATGGCACTGTTGGAAAGTATGG
 GGCAGAAGTCAGACTGAGAAGAGAACTTGA AAAAACCATTAATCAGCAAAGAATTCATGCTAGAATTGGG
 CAAGGAGTTCTGTGGTGGCTTTGATATTTGAAGCGGGCCAAATGTCATCCTTACAGTACTGGAGTACC
 TTCAGGAAAGCCCCCAGTTCCAGTTGTTGTGTGTAAGGGACAGGCAGAGCTGCAGATTTACTAGCCTA
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 AAGAAAACATTTAACTTTGGCCAGAGTGAAGCAGTTTCAATTTTCAAACAATGATGGAGTGTATGAAAA
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 ATTCTTACCATTCCAGACTGGAAGA ACTTTATAACACTAAACAAGGTCCAACCAATCCAATGTTGTTCC
 CATCTCATTCCGGATGTCAAGCAGGGTAATCTCCCCCGGGTACAAGATCACTTAAATTGATATAGGAC



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TTGTGATTGAGTATCTCATGGGAGGAACCTACAGATGCACATACACACGAAAACGTTTTTCGATTGATATA
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 CACAATGAGATCACACGAGAATTGAGTATTTCAAACACTTGGCTCAGAATCTTATTGATGATGTTCTCTG
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 AAGTAATAATCCTTTTCTTTGTAATATTTTTATGAAAGATGAAAAAGACCCCAATATAATCTGTTTGG
 CAAGATTTGCCGTGATACCCAGAGAAAAGAAATCAACATTCAGAGGCTGGTTCCTCCTGTGGTGCT
 TATTTCCAAGTGTCTTTCTCCCCAGAATTACGACAGAGACGACATGGGGTAGAAATGTTAAAAATATT
 TAATAAAAATCAAAAATTAGGCAGTTCACCTAATAGTTTACCACATATGCTCTCCCAACCAAAATTT
 TCTGTGAGTACCCATCCCAGCCAAGTTGCAAAAGTCACTTGAATCCACAACCAAGATCAAGAACCCA
 TTTTCTATAAAGCTGCAGAAGGGGATAACATAGAATTTGGAGCATTTTGTGGGACACAGAGATAGTATGGA
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 CTGAAACATGTGGGTGCTGCTGGATATAGTGAATGTTGTAAGACTTCTACTTCTCTTCACTCGGTGCAAG
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 GGATTGGTTACGAGATAGACCATCAAACAGAGAAATGCCATCTGAAGGAGGAACATTAATGGTCTTGT
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 ACGATATCCTGAAGTCAGGGCATCTATATCATTAAAGTCATTTCTTCTGAGGTGATAAACACATGGTC
 AAGCATTTATAAAGAAGTACGGTTCTACATCTGTCTCAGAGAAATACAACAACAGAGAGCAGACAA
 AAGCTCACATTTGCCTTTAATCAGATGAAACCCAAATCCATACCATATTCTCAAGGTTCTTTGAAGTT
 TCCTGTTGACTGCCATTCAGCAGGGCAGTGGTTTGTGTAGAAGAGTGCATGACTGGTGAATTTAGAAA

ATACAACAACAATAATGGTGATGAAATCATTTCCTACAAATACTCTAGAAGAGATCATGCTAGCCTTTAGC
CACTGGACCTATGAATATACCAGAGGGGAGTTACTGGTACTTGACTTACAAGGAGTGGGAGAAAACCTTGA
CTGACCCATCTGTAAATAAAGCTGAAGAAAAAGATCCTGTGACATGGTTTTGGCCCTGCCAATCTAGG
AGAAGATGCAATAAAAACTTCAGAGCCAAACATCACTGTAATCTTGCTGTGCGAAAGCTTAAACTTCCA
GATTTGAAGAGGAATGACTACACGCCTGATAAAATTATATTTCTCAGGATGAGTCATCAGATTTGAATC
TCAATCTGAAAATTCCACCAAAGAATCAGAAGCAACAAATTCTGTTCTGCTGATGTTA TAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-Mlul
ACCN:	NM_021450
Insert Size:	5592 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).
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_021450.2</u> , <u>NP_067425.2</u>
RefSeq Size:	7145 bp
RefSeq ORF:	5592 bp
Locus ID:	58800
UniProt ID:	<u>Q923J1</u>
Cytogenetics:	2 F1

Gene Summary:

Essential ion channel and serine/threonine-protein kinase. Divalent cation channel permeable to calcium and magnesium. Has a central role in magnesium ion homeostasis and in the regulation of anoxic neuronal cell death. Involved in TNF-induced necroptosis downstream of MLKL by mediating calcium influx. The kinase activity is essential for the channel function. May be involved in a fundamental process that adjusts plasma membrane divalent cation fluxes according to the metabolic state of the cell. Phosphorylates annexin A1 (ANXA1). [UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1). Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.