

Product datasheet for **SC304505**

TRPM7 (NM_017672) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: TRPM7 (NM_017672) Human Untagged Clone
Tag: Tag Free
Symbol: TRPM7
Synonyms: ALSPDC; CHAK; CHAK1; LTrpC-7; LTRPC7; TRP-PLIK
Mammalian Cell Selection: None
Vector: pCMV6-XL4
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_017672 edited
 ATGTCCCAGAAATCCTGGATAGAAAGCACTTTGACCAAGAGGGAATGTGTATATATTATA
 CCAAGTTCCAAGGACCTCACAGATGCCTTCCAGGATGTCAAATTTGTCAGCAACTCGTC
 AGGTGTTTTTGTGGTCGCTTGGTCAAGCAACATGCTTGTTTTACTGCAAGTCTTGCCATG
 AAATACTCAGATGTGAAATGGGTGACCATTTTAAATCAGGCAATAGAAGAATGGTCTGTG
 GAAAAGCATACAGAACAGAGCCCAACGGATGCTTATGGAGTCATAAATTTCAAGGGGT
 TCTCATTCTACAGAGCTAAGTATGTGAGGCTATCATATGACACCAAACCTGAAGTCATT
 CTGCAACTTCTGCTTAAAGAATGGCAAATGGAGTTACCCAAACTGTTATCTCTGTACAT
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 ATTAAAGCTGCAGTTACAACCTGGAGCCTGGATTTTAACTGGAGGAGTAAACACAGGTGTG
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 CTGCATTTCCATTTATATTGGTGGATGATGGCACTGTTGGAAAGTATGGGGCGGAAGTC
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 CTTGAATACCTTCAGGAAAGCCCCCTGTTCCAGTAGTTGTGTGTGAAGGAACAGGCAGA
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 CTTCCTCAGGATATAAGATCACTCTGATTGATATAGGACTTGTATTGAATATCTCATG



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GGAGGAACCTACAGATGCACCTATACTAGGAAACGTTTTTCGATTAATATATAATAGTCTT
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TCTTGGTCACAAC TAGGCCTCTGTGCCAAAATAGAGTTTTTAAGCAAAGAGGAGATGGGA
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TCAGGGCATCTTTATATTATCAAATCTTTTCTCCAGAGGTGGTTAATACATGGTCAAGT
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GCACAAAAGCTTACGTTTGCCTTTAATCAAATGAAACCCAAATCCATACCATATTCTCCA
AGGTTCCCTTGAAGTTTTCTGCTGATTGCCATTAGCAGGACAGTGGTTTGCTGTGGAA
GAATGTATGACTGGAGAATTTAGAAAATACAACAATAATAATGGAGATGAGATTATTCCA
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GGGGAGTTACTGGTACTTGATTTGCAAGGTGTTGGTGAAAATTTGACTGACCCATCTGTG
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GATGCAATTA AAAACTTCAGAGCAAAACATCACTGTAATCTTGCTGTAGAAAGCTTAAA
CTTCCAGATCTGAAGAGGAATGATTATACGCCTGATAAAATTATTTTCTCAGGATGAG
CCTTCAGATTTGAATCTTCAGCCTGGAAATTCACCAAAGAATCAGAATCAACTAATTCT
GTTGCTGATGTTATAA
    
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Restriction Sites: Please inquire

ACCN: NM_017672

Insert Size: 7300 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](#)

OTI Annotation: This clone has been fully sequenced and found one SNP within the protein associated with this reference, NM_017672.2:At position 5250, a C to T change results in no amino acid change.

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: [NM_017672.2](#), [NP_060142.2](#)

RefSeq Size: 7226 bp

RefSeq ORF: 5595 bp

Locus ID: 54822

UniProt ID: [Q96QT4](#)

Cytogenetics: 15q21.2

Protein Families: Druggable Genome, Ion Channels: Transient receptor potential, Protein Kinase, Transmembrane

Gene Summary: This gene belongs to the melastatin subfamily of transient receptor potential family of ion channels. The protein encoded by this gene is both an ion channel and a serine/threonine protein kinase. The kinase activity is essential for the ion channel function, which serves to increase intracellular calcium levels and to help regulate magnesium ion homeostasis. The encoded protein is involved in cytoskeletal organization, cell adhesion, cell migration and organogenesis. Defects in this gene are a cause of amyotrophic lateral sclerosis-parkinsonism/dementia complex of Guam. The gene may also be associated with defects of cardiac function. [provided by RefSeq, Aug 2017]
Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (a). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.