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Product datasheet for SC318683

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
Vector:	pCMV6 series

Fully Sequenced ORF:

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>NCBI ORF sequence for NM_017672, the custom clone sequence may differ by one or more
nucleotides
ATGTCCCAGAAATCCTGGATAGAAAGCACTTTGACCAAGAGGGAATGTGTATATATTATA
CCAAGTTCCAAGGACCCTCACAGATGCCTTCCAGGATGTCAAATTTGTCAGCAACTCGTC
AGGTGTTTTTGTGGTCGCTTGGTCAAGCAACATGCTTGTTTTACTGCAAGTCTTGCCATG
AAATACTCAGATGTGAAATTGGGTGACCATTTTAATCAGGCAATAGAAGAATGGTCTGTG
GAAAAGCATACAGAACAGAGCCCAACGGATGCTTATGGAGTCATAAATTTTCAAGGGGGT
TCTCATTCCTACAGAGCTAAGTATGTGAGGCTATCATATGACACCAAACCTGAAGTCATT
CTGCAACTTCTGCTTAAAGAATGGCAAATGGAGTTACCCAAACTTGTTATCTCTGTACAT
GGGGGCATGCAGAAATTTGAGCTTCACCCACGAATCAAGCAGTTGCTTGGAAAAGGTCTT
ATTAAAGCTGCAGTTACAACTGGAGCCTGGATTTTAACTGGAGGAGTAAACACAGGTGTG
GCAAAACATGTTGGAGATGCCCTCAAAGAACATGCTTCCAGATCATCTCGAAAGATTTGC
ACTATCGGAATAGCTCCATGGGGAGTGATTGAAAACAGAAATGATCTTGTTGGGAGAGAT
GTGGTTGCTCCTTATCAAACCTTATTGAACCCCCTGAGCAAATTGAATGTTTTGAATAAT
CTGCATTCCCATTTCATATTGGTGGATGATGGCACTGTTGGAAAGTATGGGGCGGAAGTC
AGACTGAGAAGAGAACTTGAAAAAACTATTAATCAGCAAAGAATTCATGCTAGGATTGGC
CAGGGTGTCCCTGTGGTGGCACTTATATTTGAGGGTGGGCCAAATGTTATCCTCACAGTT
CTTGAATACCTTCAGGAAAGCCCCCCTGTTCCAGTAGTTGTGTGTGAAGGAACAGGCAGA
GCTGCAGATCTGCTAGCGTATATTCATAAACAAACAGAAGAAGGAGGGAATCTTCCTGAT
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CTTCCTCCAGGATATAAGATCACTCTGATTGATATAGGACTTGTTATTGAATATCTCATG
GGAGGAACCTACAGATGCACCTATACTAGGAAACGTTTTCGATTAATATATAATAGTCTT
GGTGGAAATAATCGGAGGTCTGGCCGAAATACCTCCAGCAGCACTCCTCAGTTGCGAAAG
AGTCATGAATCTTTTGGCAATAGGGCAGATAAAAAGGAAAAAATGAGGCATAACCATTTC
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ATTAAGACAGCACAGCCCTACCGACCAAAGATTGATACAGTTATGGAAGAAGGAAAGAAG
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CCACTTAATGAACTTTTAATTTGGGCTTGCCTTATGAAGAGGCAGGTCATGGCCCGTTTT
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TTACAAGTGAAGGCAATTTCCAATATTGTATGGAAGTACCAGCGTTATCATTTTATTATG
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CATAATGAAATCACACGAGAACTGAGCATTTCCAAACACTTGGCTCAAAACCTTATTGAT
GATGGTCCTGTAAGACCTTCTGTATGGAAAAAGCATGGTGTTGTAAATACACTTAGCTCC
TCTCTTCCTCAAGGTGATCTTGAAAGTAATAATCCTTTTCATTGTAATATTTTAATGAAA
GATGACAAAGATCCCCAGTGTAATATATTTGGTCAAGACTTACCTGCAGTACCCCAGAGA
AAAGAATTTAATTTTCCAGAGGCTGGTTCCTCTTCTGGTGCCTTATTCCCAAGTGCTGTT
TCCCCTCCAGAACTGCGACAGAGACTACATGGGGTAGAACTCTTAAAAATATTTAATAAA
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TTTTTTGTTAGTACACCATCTCAGCCAAGTTGCAAAAGCCACTTGGAAACTGGAACCAAA
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CCTGTCACAGTGTATCGTTTGGAAGAGAGTTCACCCAACATACTAAATAACAGCATGTCT
TCTTGGTCACAACTAGGCCTCTGTGCCAAAATAGAGTTTTTAAGCAAAGAGGAGATGGGA

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GGAGGTTTACGAAGAGCTGTCAAAGTACAGTGTACCTGGTCAGAACATGATATCCTCAAA
TCAGGGCATCTTTATATTATCAAATCTTTTCTTCCAGAGGTGGTTAATACATGGTCAAGT
ATTTACAAAGAAGATACAGTTCTGCATCTCTGTCTGAGAGAAATTCAACAACAGAGAGCA
GCACAAAAGCTTACGTTTGCCTTTAATCAAATGAAACCCAAATCCATACCATATTCTCCA
AGGTTCCTTGAAGTTTTCCTGCTGTATTGCCATTCAGCAGGACAGTGGTTTGCTGTGGAA
GAATGTATGACTGGAGAATTTAGAAAATACAACAATAATAATGGAGATGAGATTATTCCA
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CTTCCAGATCTGAAGAGGAATGATTATACGCCTGATAAAATTATATTTCCTCAGGATGAG
CCTTCAGATTTGAATCTTCAGCCTGGAAATTCCACCAAAGAATCAGAATCAACTAATTCT
GTTCGTCTGATGTTA

Restriction Sites: Please inquire

ACCN: NM_017672

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_017672.3, NP_060142.3

RefSeq Size: 7255 bp

RefSeq ORF: 5598 bp

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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.

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