

## Product datasheet for RC240218

### TRPM7 (NM\_001301212) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TRPM7 (NM_001301212) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TRPM7
Synonyms:	ALSPDC; CHAK; CHAK1; LTrpC-7; LTRPC7; TRP-PLIK
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC240218 representing NM_001301212 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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**Protein Sequence:**

>RC240218 representing NM\_001301212  
 Red=Cloning site Green=Tags(s)

MSQKSWIESTLTKRECVYIIPSSKDPHRLPGCQICQQLVRCFCGRLLVKQHACFTASLAMKYSDVKLGDH  
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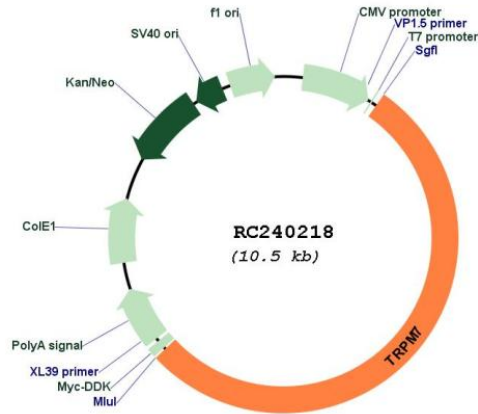
**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001301212

ORF Size: 5592 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001301212.2</a>
<b>RefSeq Size:</b>	10409 bp
<b>RefSeq ORF:</b>	5595 bp
<b>Locus ID:</b>	54822
<b>UniProt ID:</b>	<a href="#">Q96QT4</a>
<b>Cytogenetics:</b>	15q21.2
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Transient receptor potential, Protein Kinase, Transmembrane
<b>MW:</b>	213.1 kDa
<b>Gene Summary:</b>	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]