

## Product datasheet for RC216220

### TRPM2 (NM\_003307) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TRPM2 (NM_003307) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TRPM2
Synonyms:	EREG1; KNP3; LTrpC-2; LTRPC2; NUDT9H; NUDT9L1; TRPC7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC216220 representing NM_003307 Red=Cloning site Blue=ORF Green=Tags(s)

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ATGGAGCCCTCAGCCCTGAGGAAAGCTGGCTCGGAGCAGGAGGAGGGCTTTGAGGGGCTGCCAGAAGGG  
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GCACTCATCTCCAACAAGCCTGAGTTTGTGAAGCTCTTCTGGAGAACGGGGTGCAGCTGAAGGAGTTG  
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**Protein Sequence:** >RC216220 representing NM\_003307  
Red=Cloning site Green=Tags(s)

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KYVVRVSDTPSSVIYHLM TQHGLDVPNLLISVTGGAKNFNMK PRLKSI FRRGLVKVAQTGAWIITGGS  
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HSHFILVDDGTHGQYGV EIPLRTRLEKFI SEQTKERGGVAIKIPIVCV VLEGGPGTLHTIDNATNGTPC  
VVVEGSGRVADVIAQVANLPVSDITISLIQ QKLSVFFQEMFETFTESRIVEWTKKIQDIVRRRQLLTVFR  
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VQNRREL AGIIWAQSQDCIAAALACSKILKEL SKEEEDTDSSEEMLALAE EYEHRAIGVFTECYRKDEER  
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LHWIVRTL RASGSSEADVPTLASQKAAE EPDAEPGGRKKTEEPGDSYHV NARHLLYPNCPVTRFPVNE  
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TGLRGRGSLSCFGPNHTLYPMVTRWRRNEDGAI CRKSIKKMLEVLVVKLPLSEHWALPGGSREPGEMLPR  
KLKRILRQEHWPSFENLLKCGMEVYKGYMDDPRNTDN AWIETVAVSVHFQDQNDVELNRLNSNLHACDSG  
ASIRWQVVD RRIPLYANHKTL LQKAAAEFGAHY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8119\\_d04.zip](https://cdn.origene.com/chromatograms/mk8119_d04.zip)

**Restriction Sites:** SgfI-MluI

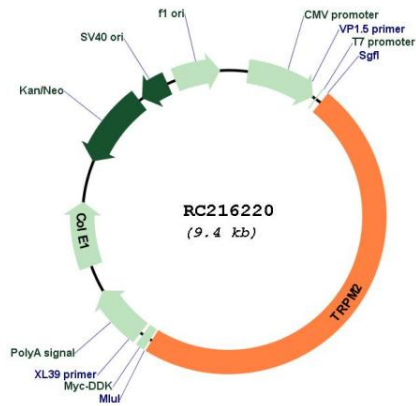
**Cloning Scheme:**



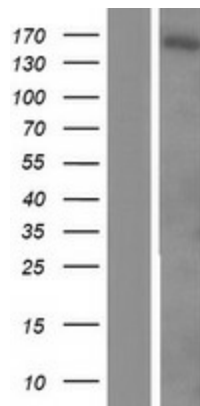
**ACCN:** NM\_003307

<b>ORF Size:</b>	4509 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_003307.3</a> , <a href="#">NP_003298.1</a>
<b>RefSeq Size:</b>	5876 bp
<b>RefSeq ORF:</b>	4512 bp
<b>Locus ID:</b>	7226
<b>UniProt ID:</b>	<a href="#">O94759</a>
<b>Cytogenetics:</b>	21q22.3
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Transient receptor potential, Transmembrane
<b>MW:</b>	171.7 kDa
<b>Gene Summary:</b>	The protein encoded by this gene forms a tetrameric cation channel that is permeable to calcium, sodium, and potassium and is regulated by free intracellular ADP-ribose. The encoded protein is activated by oxidative stress and confers susceptibility to cell death. Alternative splicing results in multiple transcript variants encoding distinct protein isoforms. Additional transcript variants of this gene have been described, but their full-length nature is not known. [provided by RefSeq, Feb 2016]

Product images:



Circular map for RC216220



Western blot validation of overexpression lysate (Cat# [LY418769]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216220 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).