

Product datasheet for RC210840

TRPM5 (NM_014555) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TRPM5 (NM_014555) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TRPM5
Synonyms:	LTRPC5; MTR1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210840 representing NM_014555 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

ATG**CAGGATGTCCAAGGCCCCCGTCCCGGAAGCCCGGGGATGCTGAAGACCGCGGGAGCTGGGCTTGC**
ACAGGGGCGAGGTCAACTTTGGAGGGTCTGGGAAGAAGCGAGGCAAGTTGTACGGGTGCCGAGCGGAGT
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AGGAGGGCGGAGAAGGGCCCGGCAAGCGGCCACGGGCCAGAAGTGGCTGCTGGACCTGAACCAGAAGA
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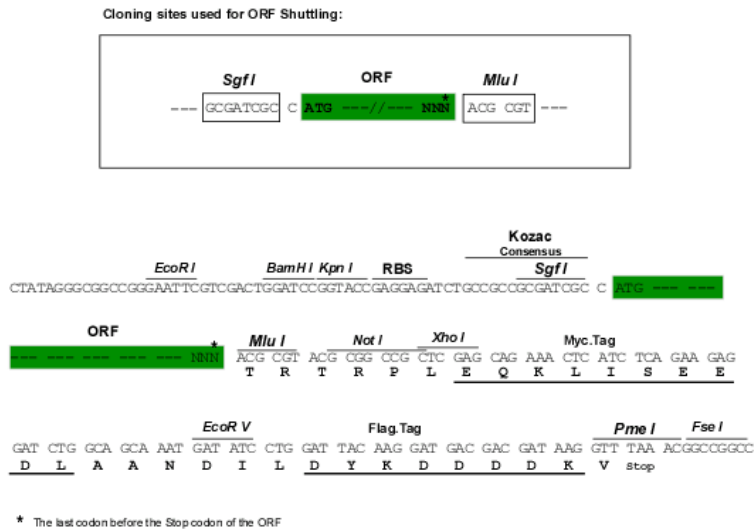
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Protein Sequence: >RC210840 representing NM_014555
Red=Cloning site Green=Tags(s)

MQDVQGPRPGSPGDAEDRRELGLHRGEVNFGGSGKKRGKFVRVPSGVAPSVLFDLLLAEWHL PAPNLVVS
 LVGEEQPFAMKSWLRDVL RKGLV KAAQSTGAWILTSALRVGLARHVQAVRDHSLASTSTKVRVAVGMA
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 QRAGYGGTGSIEIPVLC LLVNGDPNTLERISRAVEQAAPWLILAGSGGIADVLAALVNQPHLLVPKVAEK
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 LYFVVF TLVLEEI RQGF TDEDTHLVKKFTLYVGDNWNKCDMVAIFLFI VGVTCRMLPSAFEAGRTVLAM
 DMVFVTLRLIHIFAIHKQLGPKIIVVERMMKDVFFFLF LSVWL VAYGVTTQALLHPHDGRLEWIFRRVL
 YRPLYQIFGQIPLDEIDEARVNCSTHPLLLLEDSPSCPSLYANWL VILLVTFLLVTNVLLMNL LIAMFSY
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 VVTWETVQKENFLSKMEKRRRDSEGEVLRKTAHRVDFIAKYLGG LREQEKRIKCLESQINYCSVLVSSVA
 DVLAQGGGPRSSQHCGEGSQLVAADHRGGLDGWEQPGAGQPPSDT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI
Cloning Scheme:



ACCN: NM_014555

ORF Size: 3495 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 was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_014555.3](#)

RefSeq Size: 3913 bp

RefSeq ORF: 3498 bp

Locus ID: 29850

UniProt ID: [Q9NZQ8](#)

Cytogenetics: 11p15.5

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

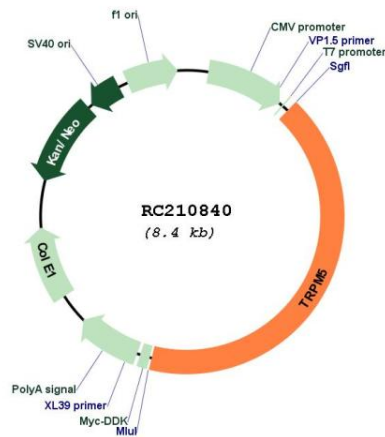
Protein Pathways: Taste transduction

MW: 131.3 kDa

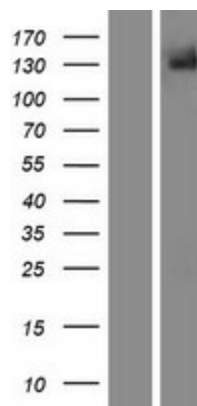
Gene Summary:

This gene encodes a member of the transient receptor potential (TRP) protein family, which is a diverse group of proteins with structural features typical of ion channels. This protein plays an important role in taste transduction, and has characteristics of a calcium-activated, non-selective cation channel that carries Na⁺, K⁺, and Cs⁺ ions equally well, but not Ca²⁺ ions. It is activated by lower concentrations of intracellular Ca²⁺, and inhibited by higher concentrations. It is also a highly temperature-sensitive, heat activated channel showing a steep increase of inward currents at temperatures between 15 and 35 degrees Celsius. This gene is located within the Beckwith-Wiedemann syndrome critical region-1 on chromosome 11p15.5, and has been shown to be imprinted, with exclusive expression from the paternal allele. [provided by RefSeq, Oct 2010]

Product images:



Circular map for RC210840



Western blot validation of overexpression lysate (Cat# [LY415198]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210840 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).