

## Product datasheet for **RC213238**

### TRPC5 (NM\_012471) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TRPC5 (NM_012471) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TRPC5
Synonyms:	PPP1R159; TRP5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC213238 representing NM\_012471  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCAACTGTACTACAAAAGGTCACTACTCACCGTACAGAGACCGCATCCCCTGCAAAATTGTGA  
 GGCTGAGACAGAGCTCTCTGCAGAGGAGAAGGCCTTCCCAATGCTGTGGAGAAGGGGACTATGCCAC  
 TGTGAAGCAGGCCCTTCAGGAGGCTGAGATCTACTATAATGTTAACATCAACTGCATGGACCCCTTGGGC  
 CGGAGTGCCCTGCTCATTGCCATTGAGAACGAGAACCTGGAGATCATGGAGCTACTGCTGAACCACAGCG  
 TGTATGTGGGTGATGCATTGCTCTATGCCATACGCAAGGAAGTGGTGGCGCTGTGGAGCTTCTGCTCAG  
 CTACAGGGCGCCAGCGGAGAGAAGCAGGTCCCCTACTGATGATGGACACGCAGTTCTCTGAATTCACA  
 CCGGACATCACTCCCATCATGCTGGCTGCCACACCAACAACCTACGAAATCATCAAATTGCTTGCCAAA  
 AACGGTCACTATCCCACGGCCCAACCAGATCCGCTGCAACTGTGTGGAGTGTGTCTAGTTCCAGAGGT  
 AGACAGCTCGCCACTCTCGTCCCAGCTGAACATCTATAAGGCTCTGGCAAGCCCTCACTCATTGCC  
 TTATCAAGTGAGGACCCATCCTAACTGCCTCCGTCTGGCTGGGAGCTCAAGGAGCTCAGCAAGTGG  
 AGAATGAGTTCAAGGCCGAGTATGAGGAGCTCTCTCAGCAGTGAAGCTCTTTGCCAAAGACCTGCTGGA  
 CCAAGCTCGGAGCTCCAGGGAAGTGGAGATCATCCTCAACCATCGAGATGACCACAGTGAAGAGCTTGAC  
 CCTCAGAAGTACCATGACCTGGCCAAGTTGAAGGTGGCAATCAAAACCACCAGAAAGAGTTTGTGCTC  
 AGCCCAACTGCCAACAGTTGCTTGCACCCTGTGGTATGATGGCTCCCTGGATGGCGCGGAAACACTG  
 GGTAGTCAAGCTTCAACTGCATGACCATTGGGTTCTGTTCCCATGCTGTCTATAGCCTACCTGATC  
 TCACCCAGGAGCAACCTTGGGCTGTTCAAGAAACCCCTTATCAAGTTTATCTGCCACACAGCATCCT  
 ATTTGACCTTCTTTATGCTTCTCTGGCTTCTCAGCACATGTGAGGACAGACCTTCACTGATACAGGG  
 GCTCCCCCAACTGTCGTGGAATGGATGATATTGCCTTGGGTTCTAGGTTTCATTTGGGGTGAGATTAAG  
 GAAATGTGGGATGGTGGATTTACTGAATACATCCATGACTGCTGGGAACTGATGGATTTTGAATGAACT  
 CCCTCTACCTGGCAACTATTTCCCTGAAGATTGTGGCCTATGTCAAGTATAATGGTTCTCGTCCAAGGGA  
 GGAATGGGAAATGTGGCACCCGACTCTGATTGCGGAAGCACTTTCGCAATATCCAACATTTTAAGTTG  
 TTGCGTCTCATATCCCTGTTACAGCCAACTCCCACTTAGGACCTCTGCAGATCTCTTGGGACGCATGC  
 TGCTTGATATCCTCAAATCCTCTTTATCTACTGCCTGGTACTACTAGCTTTTGCCAATGGACTGAACCA  
 GCTTTACTTCTATTATGAAACCAGAGCTATCGATGAGCCTAACAACTGCAAGGGGATCCGATGTGAGAAA  
 CAGAACAATGCCCTTCTCCAGCTCTTTGAGACTCTTCAGTCACTCTTCTGGTCTGATTTGGCCTTTTAA  
 ATCTATATGTACCAATGTGAAAGCCAGACACGAATTCACCGAGTTTGTAGGAGCTACCATGTTTGGAAC  
 ATACAATGTCATCTCCCTGGTAGTGCTGCTGAACATGCTGATTGCTATGATGAACAACCTCTATCAGCTT  
 ATTGCCGATCATGCTGATATCGAGTGGAAAGTTGCAAGGACGAAGCTCTGGATGAGTTACTTTGATGAAG  
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 GAACGCAATGCTGACAGCCTGATACAAAATCAACATTATCAGGAAGTTATCAGGAATTTAGTCAAAGAT  
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 TCCACTAGCAGCACTGAACTGTCTCAGAGAGACGATAAATATGATGGCAGTGGTGGGCTCGGGCCAAAT  
 CCAAGAGTGTCTCTTTAATTTAGGCTGCAAGAAAAAGACTTGCCATGGGCCACCTCTATCAGAACCAT  
 GCCAAGGTCCAGTGGTCCCAAGGAAAGTCAAAGCTGAGTCAAGCAAAACGCTCCTTCATGGGTCT  
 TCTCTCAAGAACTGGGTCTCCTATTCTCCAAATTTAATGGTCATATGCTGAACCCAGTTCAGAGCCAA  
 TGTACACAATTTCTGATGGAATTTGTCAGCAGCACTGTATGTGGCAGGACATCAGATATTCTCAGATGGA  
 GAAAGGGAAAGCAGAGGCTGTTCTCAAAGTGAATTAACCTCAGTGAAGTGAATAGGTGAAGTCCAG  
 GGCCTGCTCAGAGCAGTGAATGCCCTAGCCTGTTCCAGCTCTTCACTGTGCATCCAGCATCTGCT  
 CCTCAAATTTAACTTTAGACTCCTCAGAGGATGATTTGAACTTGGGGAGAGGCTTGTGACTTGCT  
 CATGCACAAATGGGTGATGGACAGGAAGAACAAGTTACAACCTCGCCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC213238 representing NM\_012471  
 Red=Cloning site Green=Tags(s)

MAQLYYKKVNYSPYRDRIPLQIVRAETELSAEEKAFNAVEKGDYATVKQALQEAEIYYNVNINCM DPLG  
 RSALLIAIENENLEIMELLLNHSVYVGDALLYAIRKEVVGAVELLLSYRRPSGEKQVPTLMMDTQFSEFT  
 PDITPIMLAAHTNYYEIIKLLVQKRVTIPRPHQIRCNCVEC VSSSEVDSL RHR SRLNIYKALASPSLIA  
 LSSEDPILTAFRLGWELKELSKVENEFKAEYEELSQQCKLFAKDLLDQARSSRELEIILNHRDDHSEELD  
 PQKYHDLAKLKVAIKYHQKEFVAQPNCQQLLATLWYDGFPGWRRKHVVVKKLLTCMTIGFLFPLSLIAYLI  
 SPRSNLGLFIKKPFIKFICTASYLTFLFMLLLASQHIVRTDLHVQPPPTVVEWMILPWWLGFIWGEIK  
 EMWDGGFTEYIHDWWNLMDFAMNSLYLATISLKIVAYVKYNGSRPREEWEMWHTLIAEALFAISNILSS  
 LRLISLFTANSHLGPLQISLGRMLLDILKFLFIYCLVLLAFANGLNQLFYFYETRAIDEPNNCKGIRCEK  
 QNNAFSTLFETLQSLFWSVFGLLNLYVTNVKARHEFTFVGATMFGTYNVISLVLLNMLIAMMNSYQL  
 IADHADIEWKFAARTKLWMSYFDEGGTLPFPFNIIPSPKSFLYLGWNFNTFCPKRDPGRRRRRNLRSFT  
 ERNADSLIQNHQYQEVIRNLVKRYVAAMIRNSKTHEGLTEENFKELKQDISSFYEVLDLLGNRKHPRSF  
 STSSTELSQRDDNDGSGGARAKSKSVSFNLGCKKKTCHGPPLIRTMPRSSGAQGKSKAESSSKRSFMGP  
 SLKKLGLLFSKFNHGMSEPSSEPMYIISDGI VQQH CMWQDIRYSQMEKGAEACSQSEINLSEVELGEVQ  
 GAAQSSECLACSSSLHCASSICSSNSKLLDSSSEDFETWGEACDLLMHKWGDGQEEQVTRL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mg2497\\_b02.zip](https://cdn.origene.com/chromatograms/mg2497_b02.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

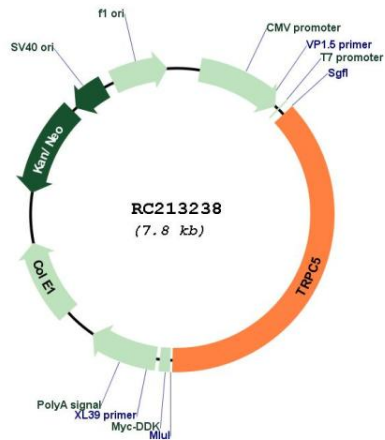


\* The last codon before the Stop codon of the ORF

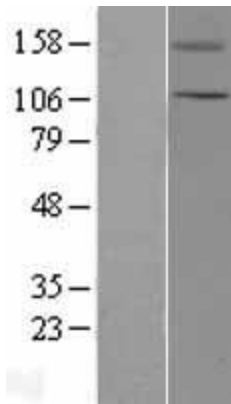
ACCN: NM\_012471  
 ORF Size: 2919 bp

<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>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_012471.2</a>
<b>RefSeq Size:</b>	5839 bp
<b>RefSeq ORF:</b>	2922 bp
<b>Locus ID:</b>	7224
<b>UniProt ID:</b>	<a href="#">Q9UL62</a>
<b>Cytogenetics:</b>	Xq23
<b>Domains:</b>	ANK, ion_trans
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Transient receptor potential, Transmembrane
<b>MW:</b>	111.2 kDa
<b>Gene Summary:</b>	This gene belongs to the transient receptor family. It encodes one of the seven mammalian TRPC (transient receptor potential channel) proteins. The encoded protein is a multi-pass membrane protein and is thought to form a receptor-activated non-selective calcium permeant cation channel. The protein is active alone or as a heteromultimeric assembly with TRPC1, TRPC3, and TRPC4. It also interacts with multiple proteins including calmodulin, CABP1, enkurin, Na(+)-H+ exchange regulatory factor (NHERF), interferon-induced GTP-binding protein (MX1), ring finger protein 24 (RNF24), and SEC14 domain and spectrin repeat-containing protein 1 (SESTD1). [provided by RefSeq, May 2010]

Product images:



Circular map for RC213238



Western blot validation of overexpression lysate (Cat# [LY402222]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213238 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).