

Product datasheet for **MR226912**

Trpc4 (NM_016984) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Trpc4 (NM_016984) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Trpc4
Synonyms:	CCE1; STRPC4; Trp4; Trrp4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR226912 representing NM_016984
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCTCAGTTCTATTACAAAAGAAATGTCAACGCCCCCTACAGAGACCGCATCCCCTGAGGATTGTCA
 GAGCAGAATCTGAGCTCTCACCATCAGAGAAAGCCTACTTGAATGCTGTGGAGAAGGGGACTATGCAAG
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 AGGACCGCCCTCCTCATTGCCATTGAAAATGAGAATCTGGAGCTTATTGAACTATTGTTGAGTTTCAATG
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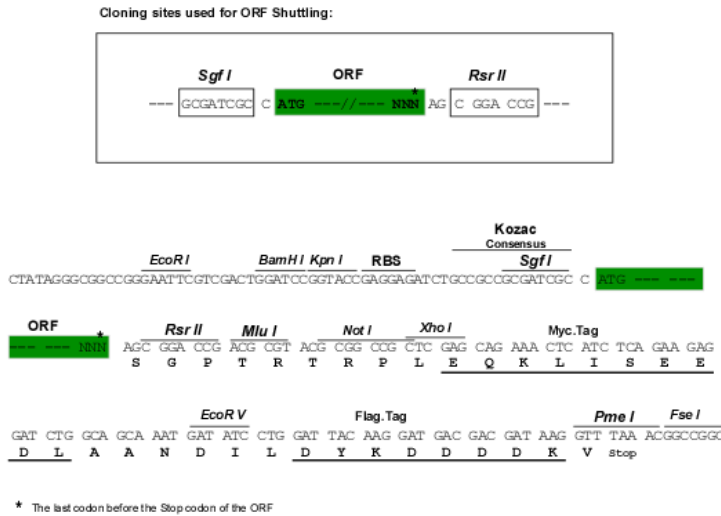
Protein Sequence: >MR226912 representing NM_016984
 Red=Cloning site Green=Tags(s)

MAQFYKRNVNAPYRDRIPLRIVRAESELSPSEKAYLNAVEKGDYASVKKSLLEEAIYFKININCIDPLG
 RTALLIAIENENLELIELLLSFNVVYVGDALLHAIRKEVVGAVELLLNHKKPSGEKQVPPILLDKQFSEFT
 PDITPIILAAHTNNYEIIKLLVQKGVSVPRPHEVRCNCVECVSDDVSLRHSRSLNIYKALASPSLIA
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 QSGNDLARLKLAIKYRQKEFVAQPNCQQLLASRWYDEFPGWRRRHWAVKMVTFCFIIGLLFPVFSVCYLIA
 PKSPLGLFIRKPFIKFICHTASYLTFLFLLLLASQHIDRSDLNRQGPPTIVEMILPWVLFWIWEIKQ
 MWDGGLQDYIHDWWNLDFVMNSLYLATISLKIIVAFVKYSALNPRESWDMWHPTLVAEALFAIANIFSSL
 RLISLFTANSHLGPLQISLGRMLLDILKFLFIYCLVLLAFANGLNQLFYEEETKGLSCKGIRCEKQNN
 FSTLFETLQSLFWSIFGLINLYVTNVKAQHEFTFVGATMFGTYNVISLVLLNMLIAMMNSYQLIADH
 ADIEWKFARTKLWMSYFEEGGLTPFPNVIPSPKSLWYLVKWIWTHLCKKKMRRKPEFSGTIGRRAADNL
 RRRHQYQEVMRNLVKRYVAAMIREAKTEEGLTEENVKELKQDISSFRFEVLGLLRGSKLSTIQSANAASS
 ADSDEKSEQSEGNGDKRKNLSLFDLTTLIHPRSAAIASERHNLNNGSALVVQEPREKQKRVNFVADIKN
 FGLFHRRSKQNAEQNANQIFSVSEEITRQQAAGALERNIELESKGLASRGDRSIPGLNEQCVLVDHRER
 NDTLGLQVQKRVCSFTFKSEKVVVEDTVPIIPKEKHAHEEDSSIDYDLSPDTAAHEDYVTRRL

SGPTRRRLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_016984

ORF Size: 2922 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_016984.3](#), [NP_058680.1](#)

RefSeq Size: 3490 bp

RefSeq ORF: 2925 bp

Locus ID: 22066

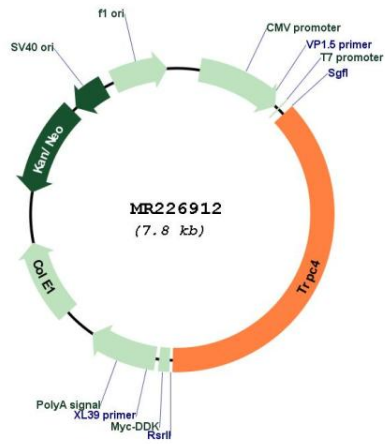
UniProt ID: [Q9QUQ5](#)

Cytogenetics: 3 25.43 cM

MW: 112 kDa

Gene Summary: Thought to form a receptor-activated non-selective calcium permeant cation channel. Probably is operated by a phosphatidylinositol second messenger system activated by receptor tyrosine kinases or G-protein coupled receptors. Acts as a cell-cell contact-dependent endothelial calcium entry channel. Has also been shown to be calcium-selective (By similarity). May also be activated by intracellular calcium store depletion. Trpc4 deficient mice lack a store-operated calcium entry in endothelial cells.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR226912