

Product datasheet for **RC210783**

TRPC6 (NM_004621) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TRPC6 (NM_004621) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TRPC6
Synonyms:	FSGS2; TRP6
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide
Sequence:

>RC210783 representing NM_004621
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCCAGAGCCCGGCTTCGGGCCCGGAGGGGCAATTCTCCCGGGCGCTGCCGGAGCCGCTGCGC
GGCGCAACGAGAGCCAGGACTATCTGCTCATGGACTCGGAGCTGGGAGAAGACGGCTGCCGCAAGCCCC
GCTGCCTTGCTACGGCTACTACCCTGCTTCGGGGATCTGACAACAGACTGGCTCACCGCGGCAGACA
GTTCTCCGTGAGAAGGGGAGAAGGTTAGCTAATCGAGGACCAGCATACATGTTTGTAGTATCGCTCCACAA
GCCTATCTATAGAGGAGGAACGCTTTTTGGATGCAGCTGAATATGGTAACATCCCAGTGGTGCAGGAAGAT
GTTAGAAGAAATGCCACTCACTCAACGTTAACTGTGTGGATTACATGGCCAGAATGCCCTACAGTTGGCA
GTGGCCAATGAGCATCTGGAATACAGAACTTCTTCAAGAAAGAAAACCTCTCTCGAGTTGGGGATG
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TGAAGGCAAGAGGTTAGCAACCAGCCCTAGCCAGTCTGAACTCCAGCAAGATGATTTTTATGCCTATGAT
GAAGATGGGACACGGTTCCTCCATGATGTGACTCCAATCATTCTGGCTGCCCACTGCCAGGAATATGAAA
TTGTGCATACCCTCCTGCGGAAGGGTGCTAGGATTGAACGGCCTCATGATTATTTCTGCAAGTGCAATGA
CTGCAACCAGAAACAGAAGCATGACTCGTTTAGCCACTCCAGATCTAGGATTAATGCCTATAAAGGCCTG
GCAAGTCCGGCTTACCTGTCATTGTCTAGTGAAGATCCAGTCAAGACGGCTTTAGAACTTAGCAATGAAC
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GCTCTCATTTACTGGTTTCTCCATGCAGCAAGATGGGGAAGATAATGCCTGGACCATTCATGAAGTTG
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CACAAAACCTCCTCCTAATGAAACCAGCACAGATAATGCAAAACAGCTGTTCCAGGATGAAAAACCTCGC
TTCTCATGGATGGAGATGCTCATTATATCTGGGTAATAGGCATGATATGGGCTGAATGTAAGAAATCT
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CGCAGCATCATTATTGCGAGATTATGGCATTTTGGCATGCTTCAAAGCCAGAGCATCATTGACGCA
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CTCTAGGATAGCTTATATTTTACCAGCAAATGAAAGCTTTGGACCTCTGCAGATACACTTGAAGAAACA
GTCAAAGACATCTCAAGTTCATGGTCATATTCATTATGGTGTGTTGTGGCCTTTATGATTGGAATGTTCA
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GAACTTATTAGAGAACTTGGAGAGAAATATCCATGGAACCAAATCAAGAGGAAACCAATAGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGAT AAGGTTTAA

Protein Sequence: >RC210783 representing NM_004621
 Red=Cloning site Green=Tags(s)

MSQSPAFGPRRGSSPRGAAGAAARRNESQDYLLMDELGEDGCPQAPLPCYGYPCFRGSDNRLAHRRT
 VLREKRRRLANRGPAYMFSRSTSLSIEEERFLDAAEYGNIPVVRKMLEECHSLNVNCVDYMGQNALQLA
 VANEHLEITELLLKKNELSRVGDALLLAI SKGYVRIVEAILSHPAFAEGKRLATSPSQSELQDDFYAYD
 EDGTRFSDVTPPIILAAHCQEYEIVHTLLRKGARIERPHDYFCCKNDCNQKQKHDSFSHSRSRINAYKGL
 ASPAYLSLSSDPVMTALEL SNELAVLANIEKEFKNDYKLSMQCKDFVVGLLDL CRNTEEVAILNGDV
 ETLQSGDHGRPNLSRLKLAIKYEVKVFVAHPNCQQQLLSIWYENLSGLRQQTMAVKFLVLAVALGIPFL
 ALIYWFAPCSKMGKIMRGPFMKFVAHAASFTIFLGLLVMNAADRFEGTKLLPNETSTDNAKQLFRMKTSC
 FSWMEMLIISWVIGMIWAECKE IWTQGPKEYLFELWNMLDFGMLAIFAASF IARFMFWHASKAQSIIDA
 NDTLKD LTKVTLGDNV KYYNLARIKWDPSPQII SEGLYAI AVVLSFSRIAYILPANESFGPLQISLGR
 VKDIFKFMVIFIMVFVAFMIGMFNLYSYYIGAKQNEAFTVEESFKTLFWAIFGLSEVKSVVINYNHKFI
 ENIGYVLYGVYVNTMVI VLLNMLIAMINSFQEIEDDADVEWKFARAKLWFSYFEEGRTPVPFNLVPS
 KSLFYLLKLLKWI SELFQGHKGFQEDAEMNKINEEKKLGILGSHEDLSKLSLDDKQVGHNKQPSIRSS
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 ELIRELGEKLSMEPNQEETNR

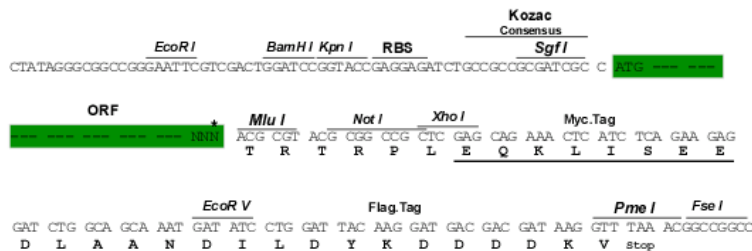
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4462_f06.zip

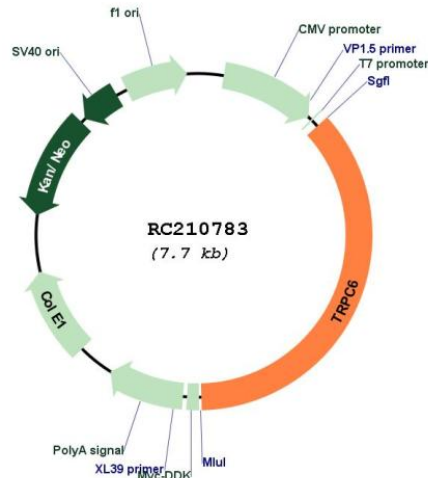
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_004621

ORF Size: 2793 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.

RefSeq: [NM_004621.2](#)

RefSeq Size: 4564 bp

RefSeq ORF: 2796 bp

Locus ID: 7225

Domains: ANK, ion_trans

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

MW: 106.1 kDa

Gene Summary:

The protein encoded by this gene forms a receptor-activated calcium channel in the cell membrane. The channel is activated by diacylglycerol and is thought to be under the control of a phosphatidylinositol second messenger system. Activation of this channel occurs independently of protein kinase C and is not triggered by low levels of intracellular calcium. Defects in this gene are a cause of focal segmental glomerulosclerosis 2 (FSGS2). [provided by RefSeq, Mar 2009]