

Product datasheet for **RC213942**

CHRM2 (NM_001006630) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CHRM2 (NM_001006630) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CHRM2
Synonyms:	HM2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC213942 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAATAACTCAACAACTCCTCTAACAATAGCCTGGCTTTACAAGTCCTTATAAGACATTTGAAGTGG
 TGTTTATTGCTCCTGGTGGCTGGATCCCTCAGTTTGGTGACCATTATCGGGAACATCCTAGTCATGGTTTC
 CATTAAAGTCAACCGCCACCTCCAGACCGTCAACAATTACTTTTTATTACGCTTGGCCTGTGCTGACCTT
 ATCATAGGTGTTTTCTCCATGAACCTGTACACCCTCTACACTGTGATTGGTTACTGGCCTTTGGGACCTG
 TGGTGTGTGACCTTTGGCTAGCCCTGGACTATGTGGTCAGCAATGCCTCAGTTATGAATCTGCTCATCAT
 CAGCTTTGACAGTACTTCTGTGCACAAAACCTCTGACCTACCCAGTCAAGCGGACCACAAAAATGGCA
 GGTATGATGATTGCAGCTGCCTGGTCTCTCTTTCATCCTCTGGGCTCCAGCCATTCTCTTCTGGCAGT
 TCATTGTAGGGGTGAGAACTGTGGAGGATGGGGAGTGCTACATTCAGTTTTTTTCCAATGCTGCTGTCAC
 CTTTGGTACGGCTATTGCAGCCTTCTATTTGCCAGTGATCATCATGACTGTGCTATATTGGCACATATCC
 CGAGCCAGCAAGAGCAGGATAAAGAAGGACAAGAAGGAGCCTGTTGCCAACCAAGACCCCGTTTCTCCAA
 GTCTGGTACAAGGAAGGATAGTGAAGCCAAACAATAACAACATGCCAGCAGTGACGATGGCCTGGAGCA
 CAACAAAATCCAGAAATGGCAAAGCCCCAGGGATCCTGTGACTGAAAACCTGTGTTTCAAGGAGAGGAGAAG
 GAGAGCTCCAATGACTCCACCTCAGTCAGTGTGTTGCCCTCTAATATGAGAGATGATGAAATAACCCAGG
 ATGAAAACACAGTTTCCACTTCCCTGGGCCATTCCAAAGATGAGAACTCTAAGCAAAACATGCATCAGAA
 TGGCACCAAGACCCCAAAAAGTACTCATGTACCCCAACTAATACCACCGTGGAGGTAGTGGGGTCTTCA
 GGTCAGAATGGAGATGAAAAGCAGAATATTGTAGCCCGCAAGATTGTGAAGATGACTAAGCAGCCTGCAA
 AAAAGAAGCCTCCTCCTCCCGGAAAAGAAAGTCAACAGGACAATCTTGGCTATTCTGTGGCTTTTCA
 CATCACTTGGGCCCATACAATGTCATGGTGTCTATTAACACCTTTTGTGCACCTTGCATCCCCAACACT
 GTGTGGACAATTGGTTACTGGCTTTGTTACATCAACAGCACTATCAACCCTGCCTGCTATGCACTTTGCA
 ATGCCACCTTCAAGAAGACCTTTAAACACCTTCTCATGTGTCATTATAAGAACATAGGCGCTACAAGGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC213942 protein sequence
 Red=Cloning site Green=Tags(s)

MNNSTNSSNSLALTSFYKTFEYVIVLVAGSLSLVTIIGNILVMVSIKVNRLQTVNNYFLFLACADL
 IIGVFSMNLTYLYTVIGYWPLGPVVCDLWLALDYVVSNASVMNLLIISFDYFCVTKPLTYPVKRTTKMA
 GMMIAAAWVLSFILWAPAILFWQFIVGVRTVEDGECYIQFFSNAAVTFGTAAAFYLPVIIMTVLYWHIS
 RASKSRIKKDKKEPVANQDPVSPSLVQGRIVKPNNNMPSDDGLEHNKIQNGKAPRDPVTENCVQGEEL
 ESSNDSTSVAASNMRRDEITQDENTVSTSLGHSKDENSQKTCIRIGTKPKSDSCTPTNTTVEVVGSS
 GQNGDEKQNIIVARKIVKMTKQPAKKKPPPSREKKVTRTRILAILLAFIITWAPYNNMVLINTFCAPCIPNT
 VWTIGYWLCYINSTINPACYALCNATFKKTFKLLMCHYKNIGATR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6456_a06.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001006630

ORF Size: 1399 bp

OTI Disclaimer: 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_001006630.1](#), [NP_001006631.1](#)

RefSeq Size: 2782 bp

RefSeq ORF: 1401 bp

Locus ID: 1129

UniProt ID: [P08172](#)

Cytogenetics: 7q33

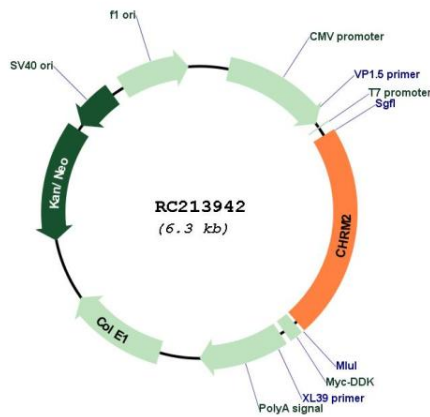
Protein Families: Druggable Genome, GPCR, Transmembrane

Protein Pathways: Calcium signaling pathway, Neuroactive ligand-receptor interaction, Regulation of actin cytoskeleton

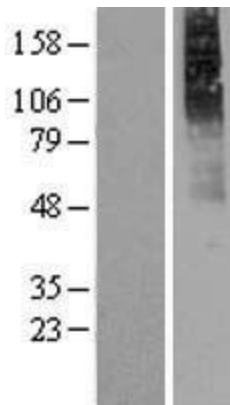
MW: 51.7 kDa

Gene Summary: The muscarinic cholinergic receptors belong to a larger family of G protein-coupled receptors. The functional diversity of these receptors is defined by the binding of acetylcholine to these receptors and includes cellular responses such as adenylate cyclase inhibition, phosphoinositide degeneration, and potassium channel mediation. Muscarinic receptors influence many effects of acetylcholine in the central and peripheral nervous system. The muscarinic cholinergic receptor 2 is involved in mediation of bradycardia and a decrease in cardiac contractility. Multiple alternatively spliced transcript variants have been described for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC213942



Western blot validation of overexpression lysate (Cat# [LY423528]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213942 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).