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Product datasheet for RC211436

CHRM2 (NM_001006629) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CHRM2 (NM_001006629) 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)

ORF Nucleotide Sequence:

>RC211436 representing NM_001006629
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAATAACTCAACAAACTCCTCTAACAATAGCCTGGCTCTTACAAGTCCTTATAAGACATTTGAAGTGG
TGTTTATTGTCCTGGTGGCTGGATCCCTCAGTTTGGTGACCATTATCGGGAACATCCTAGTCATGGTTTC
CATTAAAGTCAACCGCCACCTCCAGACCGTCAACAATTACTTTTTATTCAGCTTGGCCTGTGCTGACCTT
ATCATAGGTGTTTTCTCCATGAACTTGTACACCCTCTACACTGTGATTGGTTACTGGCCTTTGGGACCTG
TGGTGTGTGACCTTTGGCTAGCCCTGGACTATGTGGTCAGCAATGCCTCAGTTATGAATCTGCTCATCAT
CAGCTTTGACAGGTACTTCTGTGTCACAAAACCTCTGACCTACCCAGTCAAGCGGACCACAAAAATGGCA
GGTATGATGATTGCAGCTGCCTGGGTCCTCTCTTTCATCCTCTGGGCTCCAGCCATTCTCTTCTGGCAGT
TCATTGTAGGGGTGAGAACTGTGGAGGATGGGGAGTGCTACATTCAGTTTTTTTCCAATGCTGCTGTCAC
CTTTGGTACGGCTATTGCAGCCTTCTATTTGCCAGTGATCATCATGACTGTGCTATATTGGCACATATCC
CGAGCCAGCAAGAGCAGGATAAAGAAGGACAAGAAGGAGCCTGTTGCCAACCAAGACCCCGTTTCTCCAA
GTCTGGTACAAGGAAGGATAGTGAAGCCAAACAATAACAACATGCCCAGCAGTGACGATGGCCTGGAGCA
CAACAAAATCCAGAATGGCAAAGCCCCCAGGGATCCTGTGACTGAAAACTGTGTTCAGGGAGAGGAGAAG
GAGAGCTCCAATGACTCCACCTCAGTCAGTGCTGTTGCCTCTAATATGAGAGATGATGAAATAACCCAGG
ATGAAAACACAGTTTCCACTTCCCTGGGCCATTCCAAAGATGAGAACTCTAAGCAAACATGCATCAGAAT
TGGCACCAAGACCCCAAAAAGTGACTCATGTACCCCAACTAATACCACCGTGGAGGTAGTGGGGTCTTCA
GGTCAGAATGGAGATGAAAAGCAGAATATTGTAGCCCGCAAGATTGTGAAGATGACTAAGCAGCCTGCAA
AAAAGAAGCCTCCTCCTTCCCGGGAAAAGAAAGTCACCAGGACAATCTTGGCTATTCTGTTGGCTTTCAT
CATCACTTGGGCCCCATACAATGTCATGGTGCTCATTAACACCTTTTGTGCACCTTGCATCCCCAACACT
GTGTGGACAATTGGTTACTGGCTTTGTTACATCAACAGCACTATCAACCCTGCCTGCTATGCACTTTGCA
ATGCCACCTTCAAGAAGACCTTTAAACACCTTCTCATGTGTCATTATAAGAACATAGGCGCTACAAGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC211436 representing NM_001006629
Red=Cloning site Green=Tags(s)

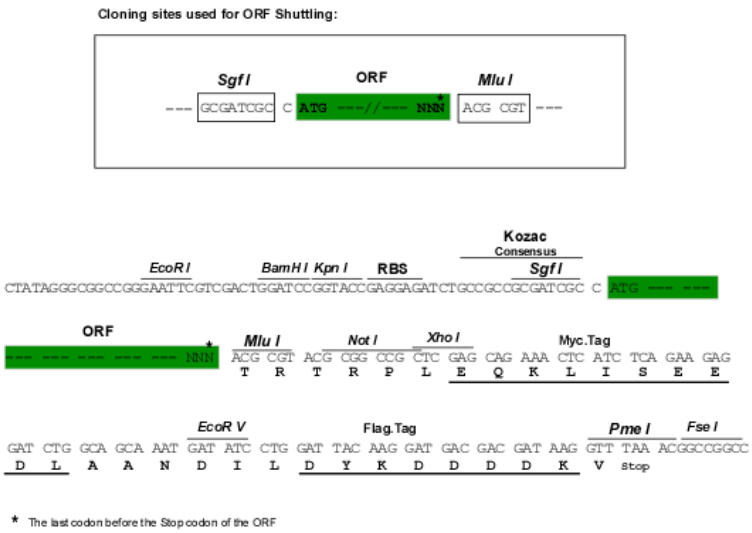
MNNSTNSSNNSLALTSPYKTFEVVFIVLVAGSLSLVTIIGNILVMVSIKVNRHLQTVNNYFLFSLACADL
IIGVFSMNLYTLYTVIGYWPLGPVVCDLWLALDYVVSNASVMNLLIISFDRYFCVTKPLTYPVKRTTKMA
GMMIAAAWVLSFILWAPAILFWQFIVGVRTVEDGECYIQFFSNAAVTFGTAIAAFYLPVIIMTVLYWHIS
RASKSRIKKDKKEPVANQDPVSPSLVQGRIVKPNNNNMPSSDDGLEHNKIQNGKAPRDPVTENCVQGEEK
ESSNDSTSVSAVASNMRDDEITQDENTVSTSLGHSKDENSKQTCIRIGTKTPKSDSCTPTNTTVEVVGSS
GQNGDEKQNIVARKIVKMTKQPAKKKPPPSREKKVTRTILAILLAFIITWAPYNVMVLINTFCAPCIPNT
VWTIGYWLCYINSTINPACYALCNATFKKTFKHLLMCHYKNIGATR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6096_h07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001006629

ORF Size: 1398 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_001006629.3

RefSeq Size: 2387 bp

RefSeq ORF: 1401 bp

Locus ID: 1129

UniProt ID: P08172

Cytogenetics: 7q33

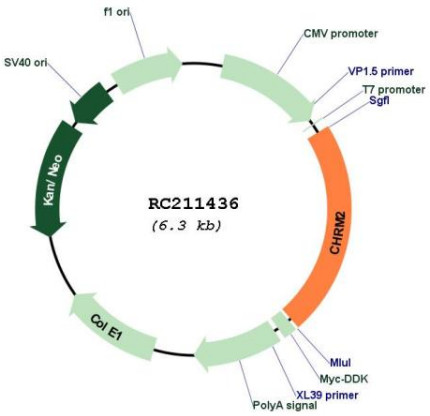
Protein Families: Druggable Genome, GPCR, Transmembrane

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

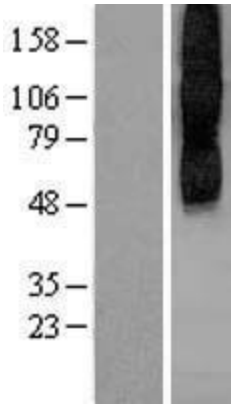
MW: 51.7 kDa

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 RC211436



Western blot validation of overexpression lysate (Cat# [LY423524]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC224964] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).