

Product datasheet for **RG211436**

CHRM2 (NM_001006629) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CHRM2 (NM_001006629) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CHRM2
Synonyms:	HM2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG211436 representing NM_001006629
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAATAACTCAACAACTCCTCTAACAATAGCCTGGCTTTACAAGTCCTTATAAGACATTTGAAGTGG
 TGTTTATTGTCCTGGTGGCTGGATCCCTCAGTTTGGTGACCATTATCGGGAACATCCTAGTCATGGTTTC
 CATTAAAGTCAACCGCCACCTCCAGACCGTCAACAATTACTTTTTATTACGCTTGGCCTGTGCTGACCTT
 ATCATAGGTGTTTTCTCCATGAACCTGTACACCCTCTACACTGTGATTGGTTACTGGCCTTTGGGACCTG
 TGGTGTGTGACCTTTGGCTAGCCCTGGACTATGTGGTCAGCAATGCCTCAGTTATGAATCTGCTCATCAT
 CAGCTTTGACAGTACTTCTGTGCACAAAACCTCTGACCTACCCAGTCAAGCGGACCACAAAAATGGCA
 GGTATGATGATTGCAGCTGCCTGGTCTCTCTTTCATCCTCTGGGCTCCAGCCATTCTCTTCTGGCAGT
 TCATTGTAGGGGTGAGAACTGTGGAGGATGGGGAGTGCTACATTCAGTTTTTTTTCCAATGCTGCTGTCAC
 CTTTGGTACGGCTATTGCAGCCTTCTATTTGCCAGTGATCATCATGACTGTGCTATATTGGCACATATCC
 CGAGCCAGCAAGAGCAGGATAAAGAAGGACAAGAAGGAGCCTGTTGCCAACCAAGACCCCGTTTCTCCAA
 GTCTGGTACAAGGAAGGATAGTGAAGCCAAACAATAACAACATGCCAGCAGTGACGATGGCCTGGAGCA
 CAACAAAATCCAGAAATGGCAAAGCCCCAGGGATCCTGTGACTGAAAACCTGTGTTCCAGGGAGAGGAGAAG
 GAGAGCTCCAATGACTCCACCTCAGTCAGTGCTGTTGCCCTCTAATATGAGAGATGATGAAATAACCCAGG
 ATGAAAACACAGTTTCCACTTCCCTGGGCCATTCCAAAGATGAGAACTCTAAGCAAAACATGCATCAGAAAT
 TGGCACCAGACCCCAAAAAGTGACTCATGTACCCCACTAATACCACCGTGGAGGTAGTGGGGTCTTCA
 GGTCAGAAATGGAGATGAAAAGCAGAATATTGTAGCCCGCAAGATTGTGAAGATGACTAAGCAGCCTGCAA
 AAAAGAAGCCTCCTCCTCCCGGAAAAGAAAGTCAACCAGGACAATCTTGGCTATTCTGTTGGCTTTTCAT
 CATCACTTGGGCCCATACAATGTCATGGTGCTCATTAAACACCTTTTGTGCACCTTGCATCCCCAACACT
 GTGTGGACAATTGGTTACTGGCTTTGTTACATCAACAGCACTATCAACCCTGCCTGCTATGCACTTTGCA
 ATGCCACCTTCAAGAAGACCTTTAAACACCTTCTCATGTGCTATTATAAGAACATAGGCGCTACAAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG211436 representing NM_001006629
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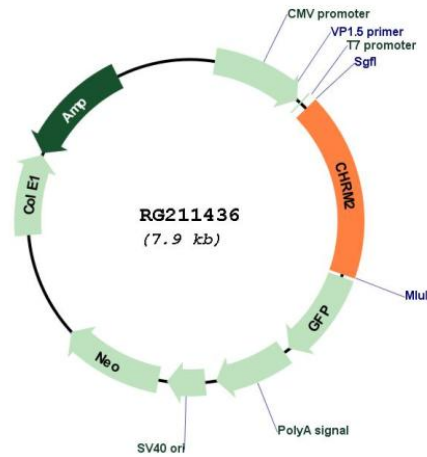
MNNSTNSSNSLALTSPYKTFEVFIVLVAGSLSLVTIIGNILVMVSIKVNRLQTVNNYFLFLSLACADL
 IIGVFSMNLTYLYTVIGYWPLGPVVCDLWLALDYVVSNASVMNLLIISFDRYFCVTKPLTYPVKRTTKMA
 GMMIAAAWVLSFILWAPAILFWQFIVGVRTVEDGECYIQFFSNAAVTFGTAIAAFYLPVIIMTVLYWHIS
 RASKSRIKKDKKEPVANQDPVPSLVQGRIVKPNNNMPSDDGLEHNKIQNGKAPRDPVTENCVQGEK
 ESSNDSTSVSAVASNMRDDEITQDENTVSTSLGHSKDENSQKTCIRIGTKPKSDSCTPTNTTVEVVGSS
 GQNGDEKQNIIVARKIVKMTKQPAKKKPPPSREKKVTRTILAILLAFIITWAPYVMVLINTFCAPCIPNT
 VWTIGYWLCYINSTINPACYALCNATFKKTFKHLLMCHYKNIGATR

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Plasmid Map:


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:	<ol style="list-style-type: none">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:	<u>NM_001006629.3</u>
RefSeq Size:	2387 bp
RefSeq ORF:	1401 bp
Locus ID:	1129
UniProt ID:	<u>P08172</u>
Cytogenetics:	7q33
Protein Families:	Druggable Genome, GPCR, Transmembrane
Protein Pathways:	Calcium signaling pathway, Neuroactive ligand-receptor interaction, Regulation of actin cytoskeleton
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]