

Product datasheet for **RG207196**

Muscarinic Acetylcholine Receptor M5 (CHRM5) (NM_012125) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Muscarinic Acetylcholine Receptor M5 (CHRM5) (NM_012125) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Muscarinic Acetylcholine Receptor M5
Synonyms:	HM5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG207196 representing NM_012125
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAAGGGGATTCTTACCAACAATGCAACCACCGTCAATGGCACCCAGTAAATCACCAGCCTTTGGAAC
 GCCACAGTTGTGGGAAGTCATCACCATTGCAGCTGTGACTGCTGTGGTAAGCCTGATCACCATTGTGGG
 CAATGTCTTGGTCATGATCTCCTTCAAAGTCAACAGCCAGCTCAAGACAGTTAACAACACTATTACCTGCTC
 AGCTTAGCCTGTGCAGATCTCATCATTGGAATCTTCTCCATGAACCTCTACACCACCTACATCCTCATGG
 GACGCTGGGCTCTCGGGAGTCTGGCTTGTGACCTTTGGCTTGCCTGACTGGACTACGTGGCCAGCAACGCTTC
 TGTGATGAACCTTCTGGTATCAGTTTTGACCGTTACTTTCCATCACAAGACCTTGACATATCGGGCC
 AAGCGTACTCCGAAAAGGGCTGGCATCATGATTGGCTTGGCTGGCTGATCTCCTTCATCCTCTGGGCC
 CAGCAATCCTCTGCTGGCAGTACTTGGTTGGGAAGCGGACAGTCCACTGGATGAGTGCCAGATCCAGTT
 TCTCTCTGAGCCACCATCACTTTTGGCACTGCCATTGCTGCCTTCTACATCCCTGTTTCTGTCATGACC
 ATCCTCTACTGTGAATCTACCGGAAACAGAGAAGCGAACCAAGGACCTGGCTGACCTCCAGGGTTCTG
 ACTCTGTGACCAAGCTGAGAAGAGAAAGCCAGCTCATAGGGCTCTGTTCCAGATCCTGCTTGCCTGTCC
 TCGACCCACCCTGGCCAGCGGAAAGGAACAGGCTCCTGGTCATCCTCCCGCAGGAGCACCTCCACC
 ACTGGGAAGCCATCCCAAGCCACTGGCCCAAGCGCCAATTGGGCCAAAGCTGAGCAGCTCACCACCTGTA
 GCAGTACCCTTCTCAGAGGATGAGGACAAGCCCGCCACTGACCTGTCTCCAAGTGGTCTACAAGAG
 TCAGGGTAAGGAAAGCCAGGGGAAGAATTCAGTGCTGAAGAGACTGAGGAAATTTTTGTAAAGCTGAA
 ACTGAAAAAGTACTATGACACCCAACTACCTTCTGTCTCCAGCAGCTGCTCATAGACCAAGAGTC
 AGAAATGTGTGGCTATAAGTTCCGATTGGTGGTAAAAGCTGACGGGAACCAGGAGACCAACAATGGCTG
 TACAAGGTGAAAATCATGCCCTGCCCTTCCAGTGGCCAAGGAACCTTCAACGAAAGGCTCAATCCC
 AACCCAGCCATCAAATGACCAAACGAAAGAGAGTGGTCTAGTCAAAGAGAGGAAAGCAGCCAGACAC
 TGAGTGCCATTCTCCTGGCCTTATCATCACATGGACCCGATAACATCATGGTCTGTTTCTACCTT
 CTGTGACAAGTGTGCCAGTACCCTGTGGCACTTGGGCTATTGGTTGTGCTATGTCAATAGCACTGTC
 AACCCATCTGCTATGCCCTCTGCAACAGAACCTTCAAGGAGACCTTAAAGATGCTGCTTCTCTGCCGAT
 GGAAAAAGAAAAAGTGGAAAGAGAAGTTGACTGGCAGGGGAACAGCAAGCTACCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG207196 representing NM_012125
 Red=Cloning site Green=Tags(s)

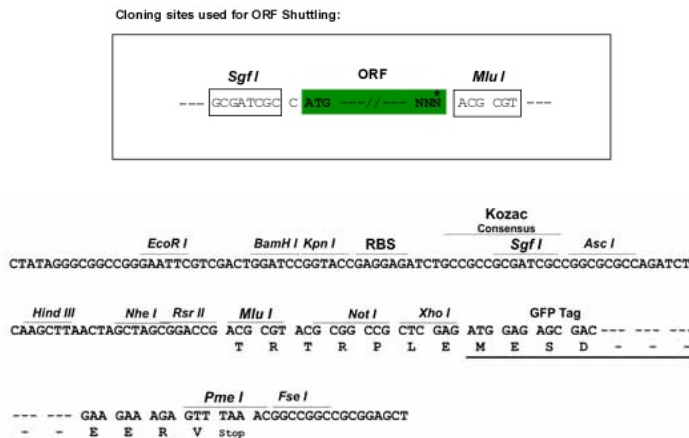
MEGDSYHNATTVNGTPVNHQPLERHRLWEVITIAAVTAVVSLITIVGNLVMISFKVNSQLKTVNNYLL
 SLACADLIIGIFSMNLYTTYILMGRWALGSLACDLWLALDYVASNASVMNLLVISFDRYFSITRPLTYRA
 KRTPKRAGIMIGLAWLISFILWAPAILCWQYLVGKRTVPLDECQIQFLSEPTITFGTAIAAFYIPVSVMT
 ILYCRIYRETEKRTKDLADLQGSDSVTKAERKPAHRALFRSCLRCRPTLAQRERNQASWSSRRSTST
 TGKPSQATGPSANWAKAEQLTTCSSYPSEDEDKPADPVLQVVYKSQGKESPGEEFSAEETEEIFVKA
 TEKSDYDTPNYLLSPAAHRPKSQKCVAYKFRLLVVKADGNQETNNGCHKVKIMPCFPVAKPSTKGLNP
 NPSHQMTKRKRVLVKERKAAQTL SAILLAFIITWTPYINIMVLVSTFCDKCVPVTLWHLGYWLCYVNSTV
 NPICYALCNRTFRKTFKMLLLCRWKKKKVEEKL YWQNSKLP

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_012125

ORF Size: 1596 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_012125.2](#), [NP_036257.1](#)

RefSeq Size: 2699 bp

RefSeq ORF: 1599 bp

Locus ID: 1133

UniProt ID: [P08912](#)

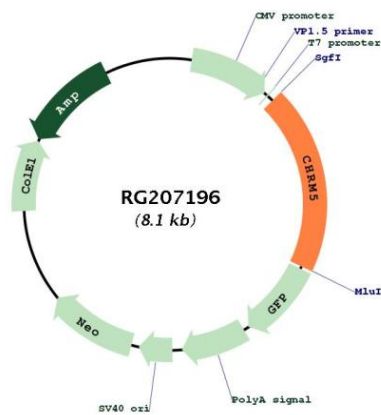
Cytogenetics: 15q14

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 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 clinical implications of this receptor are unknown; however, stimulation of this receptor is known to increase cyclic AMP levels. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG207196