

Product datasheet for **RC207196**

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:	Myc-DDK
Symbol:	Muscarinic Acetylcholine Receptor M5
Synonyms:	HM5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC207196 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGAAGGGGATTCTTACCACAATGCAACCACCGTCAATGGCACCCAGTAAATCACCAGCCTTTGGAAC
 GCCACAGTTTGTGGGAAGTCATCACCATTGCAGCTGTGACTGCTGTGGTAAGCCTGATCACCATTGTGGG
 CAATGTCTTGGTCATGATCTCCTTCAAAGTCAACAGCCAGCTCAAGACAGTTAACAACCTATTACCTGCTC
 AGCTTAGCCTGTGCAGATCTCATCATTGGAATCTTCTCCATGAACCTCTACACCACCTACATCCTCATGG
 GACGCTGGGCTCTCGGGAGTCTGGCTTGTGACCTTTGGCTTGCAGTGGTACGTTGGCCAGCAACGCTTC
 TGTGATGAACCTTCTGGTGATCAGTTTGTGACCTTACTTTCCATCACAAGACCTTGACATATCGGGCC
 AAGCGTACTCCGAAAAGGGCTGGCATCATGATTGGCTTGGCTGGCTGATCTCCTTCATCCTCTGGGCC
 CAGCAATCCTCTGCTGGCAGTACTTGGTTGGGAAGCGGACAGTTCCACTGGATGAGTGCCAGATCCAGTT
 TCTCTCTGAGCCACCATCACTTTTGGCACTGCCATTGCTGCCTTCTACATCCCTGTTTCTGTCATGACC
 ATCCTCTACTGTGAATCTACCGGGAACAGAGAAGCGAACCAAGGACCTGGCTGACCTCCAGGGTTCTG
 ACTCTGTGACCAAAGCTGAGAAGAGAAAGCCAGCTCATAGGGCTCTGTTGAGATCCTGCTTGGCGTGTCC
 TCGACCCACCCTGGCCAGCGGGAAGGAACAGGCCTCCTGGTCATCCTCCCGCAGGAGCACCTCCACC
 ACTGGGAAGCCATCCCAAGCCACTGGCCCAAGCGCAATTGGGCCAAAGCTGAGCAGCTCACCACCTGTA
 GCAGTACCCTTCTCAGAGGATGAGGACAAGCCCGCCACTGACCTGTCTCCAAGTGGTCTACAAGAG
 TCAGGGTAAGGAAAGCCAGGGGAAGAATTCAGTGCTGAAGAGACTGAGGAAATTTTGTGAAAGCTGAA
 ACTGAAAAAGTGACTATGACACCCAACTACCTTCTGTCTCCAGCAGCTGCTCATAGACCCAAAGATC
 AGAAATGTGTGGCTATAAGTTCCGATTGGTGGTAAAAGCTGACGGGAACAGGAGACCAACAATGGTG
 TCACAAGGTGAAAATCATGCCCTGCCCTTCCCAGTGGCCAAGGAACCTTCAACGAAAGGCCTCAATCCC
 AACCCAGCCATCAAATGACCAAACGAAAGAGAGTGGTCTAGTCAAAGAGAGGAAAGCAGCCAGACAC
 TGAGTGCCATTCTCCTGGCCTTCATCATCATGACCCCGTATAACATCATGGTCTGTTTCTACCTT
 CTGTGACAAGTGTGTCCAGTACCCTGTGGCACTTGGGCTATTGGTTGTGCTATGTCAATAGCACTGTC
 AACCCATCTGCTATGCCCTCTGCAACAGAACCTTCAGGAAGACCTTTAAGATGCTGCTTCTCTGCCGAT
 GGAAAAAGAAAAAGTGAAGAGAAGTTGTAAGTGGCAGGGGAACAGCAAGCTACCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC207196 protein sequence
 Red=Cloning site Green=Tags(s)

MEGDSYHNATTVNGTPVNHQPLERHRLWEVITIAAVTAVVSLITIVGNVLMISFKVNSQLKTVNNYYLL
 SLACADLIIGIFSMNLYTTYILMGRWALGSLACDLWLALDYVASNASVMNLLVISFDRYFSITRPLTYRA
 KRTPKRAGIMIGLAWLISFILWAPAILCWQYLVGKRTVPLDECQIQFLSEPTITFGTAIAAFYIPVSVMT
 ILYCRIYRETEKRTKDLADLQGSDSVTKAERKPAHRALFRSCLRCPRPTLAQRERNQASWSSRRSTST
 TGKPSQATGPSANWAKAEQLTTCSSYPSEDEDKPADPVLQVYKSQKESPGEEFSAEETEEIFVKA
 TEKSDYDTPNYLLSPAAHRPKSQKCVAYKFRLLVVKADGNQETNNGCHKVKIMPCFPVPAKEPSTKGLNP
 NPSHQMTKRKRVLVKERKAAQTLAAILAFIITWTPYNIMVLVSTFCDKCVPTLWHLGYWLCYVNSTV
 NPICYALCNRTFRKTFKMLLLCRWKKKKVEEKLWQGNKSLP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

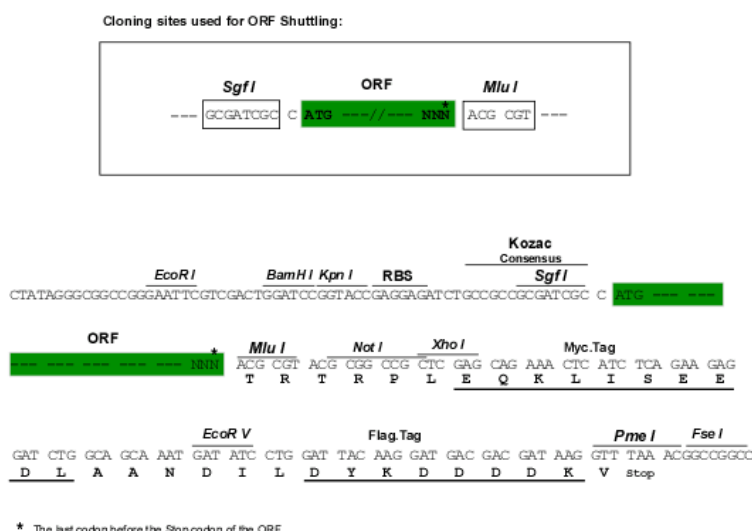
Chromatograms:

https://cdn.origene.com/chromatograms/mk6134_f05.zip

Restriction Sites:

Sgfl-MluI

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_012125.4](#)

RefSeq Size: 3055 bp

RefSeq ORF: 1599 bp

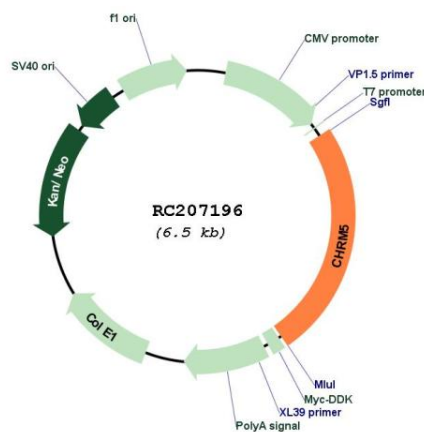
Locus ID: 1133

UniProt ID: [P08912](#)

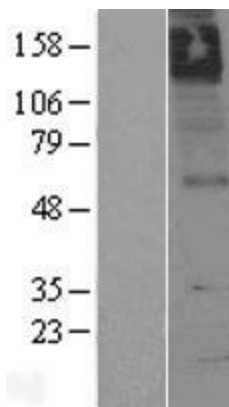
Cytogenetics: 15q14

Protein Families:	Druggable Genome, GPCR, Transmembrane
Protein Pathways:	Calcium signaling pathway, Neuroactive ligand-receptor interaction, Regulation of actin cytoskeleton
MW:	60.1 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 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 RC207196



Western blot validation of overexpression lysate (Cat# [LY402152]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207196 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).