

Product datasheet for **RG214127**

Muscarinic Acetylcholine Receptor M4 (CHRM4) (NM_000741) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Muscarinic Acetylcholine Receptor M4 (CHRM4) (NM_000741) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Muscarinic Acetylcholine Receptor M4
Synonyms:	HM4; M4R
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG214127 representing NM_000741
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCCAACCTCACACCTGTCAATGGCAGCTCGGGAATCAGTCCGTGCGCTGGTCACGTCATCATCCC
 ACAATCGCTATGAGACGGTGAAATGGTCTTCATTGCCACAGTGACAGGCTCCCTGAGCCTGGTGACTGT
 CGTGGGCAACATCCTGGTGATGCTGTCCATCAAGGTCAACAGGCAGCTGCAGACAGTCAACAACACTTTC
 CTCTTCAGCCTGGCGTGTGCTGATCTCATCATAGGCGCCTTCTCCATGAACCTCTACACCGTGTACATCA
 TCAAGGGCTACTGGCCCTGGGCGCCGTGGTCTGCGACCTGTGGCTGGCCCTGGACTACGTGGTGAGCAA
 CGCCTCCGTATGAACCTTCTCATCATCAGCTTGACCGTACTTCTGCGTCACCAAGCCTCTCACCTAC
 CCTGCCGGCGCACCACCAAGATGGCAGGCCTCATGATTGCTGCTGCCTGGTACTGTCTTCTGCTCT
 GGGCGCCTGCCATCTTGTCTGGCAGTTTGTGGTGGGTAAGCGGACGGTGCCGACAACCAAGTGTTCAT
 CCAGTTCTCTGCAACCCAGCAGTGACCTTTGGCACAGCCATTGCTGCCTTCTACCTGCCTGTGGTCATC
 ATGACGGTGTGTACATCCACATCTCCCTGGCCAGTGCAGCCGAGTCCACAAGCACCGGCCGAGGGCC
 CGAAGGAGAAGAAAGCCAAGACGCTGGCCTTCCCTCAAGAGCCACTAATGAAGCAGAGCGTCAAGAGCC
 CCCGCCGGGGAGGCCGCCCGGGAGGAGCTGCGCAATGGCAAGCTGGAGGAGGCCCGCCCGCCAGCGTTG
 CCACCGCCACCGCGCCCGTGGCTGATAAAGGACACTTCCAATGAGTCCAGCTCAGGCAGTCCACCCAGA
 ACACCAAGGAACGCCAGCCACAGAGCTGTCCACCACAGAGGCCACCACGCCCGCATGCCCGCCCTCC
 CCTGCAGCCGCGGCCCTCAACCCAGCCTCCAGATGGTCCAAGATCCAGATTGTGACGAAGCAGACAGGC
 AATGAGTGTGTGACAGCCATTGAGATTGTGCTGCCACGCCGGTGGCATGCGCCCTGCGGCCAACGTGG
 CCCGCAAGTTCGCCAGCATCGCTCGCAACCAGGTGCGCAAGAAGCGGCAGATGGCGGCCCGGGAGCGCAA
 AGTGACACGAACGATCTTTGCCATTCTGCTAGCCTTTCATCCTCACCTGGACGCCCTACAACGTCATGGTC
 CTGGTGAACACCTTCTGCCAGAGCTGCATCCCTGACACGGTGTGGTCCATTGGCTACTGGCTCTGTACG
 TCAACAGCACCATCAACCCTGCCTGCTATGCTCTGTGCAACGCCACCTTTAAAAAGACCTTCCGGCACCT
 GCTGCTGTGCCAGTATCGGAACATCGGCACTGCCAGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG214127 representing NM_000741
 Red=Cloning site Green=Tags(s)

MANFTPVNGSSGNQSVRLVTSSSHNRYETVEMVFIATVTGSLSLVTVVGNILVMLSIKVNRLQTVNNYF
 LFSLACADLIIGAFSMNLYTVYIIKGYWPLGAVCDLWLALDYVVSNASVMNLLIISFDRYFCVTKPLTY
 PARRTTKMAGLMIAAAWVLSFVLWAPAILFWQFVVGKRTVPDNQCFIQFLSNPAVTFGTAAAFYLPVVI
 MTVLYIHIISLASRSRVHHRPEGPKEKAKTLAFLKSPMLKQSVKPPPGEAAREELRNGKLEEAPPPAL
 PPPRPVADKDTSNSSSGSATQNTKERPATELSTTEATTPAMPAPPLQPRALNPASRWSKIQIVTKQTG
 NECVTAIEIVPATPAGMRPAANVARKFASIARNQVRKKRQMAARERKVTRTIFAILLAFILTWTPYNVMV
 LVNTFCQSCIPDVTWSIGYWLVCYNSTINPACYALCNATFKKTRHLLLCQYRNIGTAR

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_000741

ORF Size: 1437 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_000741.2](#), [NP_000732.2](#)

RefSeq Size: 1468 bp

RefSeq ORF: 1440 bp

Locus ID: 1132

UniProt ID: [P08173](#)

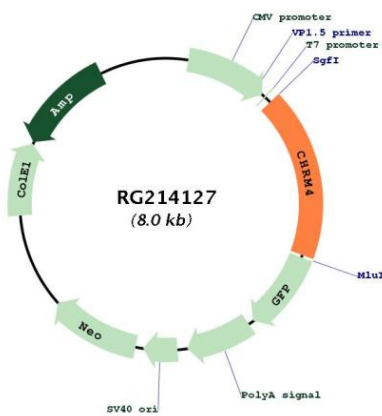
Cytogenetics: 11p11.2

Protein Families: Druggable Genome

Protein Pathways: 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, mouse studies link its function to adenylyl cyclase inhibition. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG214127