

## Product datasheet for **SC123739**

### CHRM1 (BC007740) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CHRM1 (BC007740) Human Untagged Clone
Tag:	Tag Free
Symbol:	CHRM1
Synonyms:	cholinergic receptor, muscarinic 1; HM1; M1; MGC30125; muscarinic acetylcholine receptor M1
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:**

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>OriGene sequence for BC007740 edited
GGCAGTGGGGTTGAGGACCCTACAGACCCTCTTCAGCCCCGTGGTGATGACTTTCCCCT
GAGGAAGCCCTGTAGCGTGCCTGGAGGAAGGGCTCTCCAACCCAGCCCCACCTAGCCA
CCATGAACACTTCAGCCCCACCTGCTGTGAGCCCCAACATCACCGTCTGGCACCAGGAA
AGGGTCCCTGGCAAGTGGCCTTATTGGGATCACACGGGCTCCTGTGCTAGCCACAG
TGACAGGCAACCTGCTGGTACTCATCTCTTTCAAGGTCAACACGGAGCTCAAGACATGA
ATAACTACTTCTGCTGAGCCTGGCCTGTGCTGACCTCATCATCGGTACCTTCTCCATGA
ACCTCTATACCAGTACCTGCTCATGGGCCACTGGGCTCTGGGCACGCTGGCTTGTGACC
TCTGGCTGGCCCTGGACTATGTGCCAGCAATGCCTCCGTATGAATCTGCTGCTCATCA
GCTTTGACCGCTACTTCTCCGTGACTCGGCCCTGAGCTACCGTGCCAAGCGCACACCC
GCCGGCAGCTCTGATGATCGGCCTGGCCTGGTGGTTTCTTTGTGCTCTGGGCCCCAG
CCATCCTCTTCTGGCAGTACCTGGTAGGGGAGCGGACAGTGTAGCTGGCAGTGTACA
TCCAGTTCCTCTCCAGCCCATCATCACCTTTGGCACAGCCATGGCTGCCTTCTACCTCC
CTGTACAGTGTGTCACGCTCTACTGGCGCATCTACCGGGAGACAGAGAACCAGCAC
GGGAGCTGGCAGCCCTTACAGGGTCCGAGACGCCAGGCAAGGGGGTGGCAGCAGCAGCA
GCTCAGAGAGGTCTCAGCCAGGGGCTGAGGGCTACCAGAGACTCTCCAGGCCGCTGCT
GTCGCTGCTGCCGGGCCCCAGGCTGCTGCAGGCCTACAGCTGGAAGGAAGAAGAGGAAG
AGGACGAAGGCTCCATGGAGTCCCTCACATCCTCAGAGGGAGAGGAGCCTGGCTCCGAAG
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GGAGTCCCCAAATACAGTCAAGAGGCCGACTAAGAAAGGGCGTGATCGAGCTGGCAAGG
GCCAGAAGCCCGTGGAAAGGAGCAGCTGGCAAGCGGAAGACCTTCTCGCTGGTCAAGG
AGAAGAAGCGGCTCGGACCTGAGTGCATCCTCCTGGCCTTTCATCCTCACCTGGACAC
GTACAACATCATGGTGTGGTGTCCACCTTCTGCAAGGACTGTGTTCCGAGACCCTGT
GGGAGCTGGGCTACTGGCTGTGCTACGTCAACAGCACCATCAACCCCATGTGCTACGCAC
TCTGCAACAAAGCCTTCCGGGACACCTTTCGCCTGCTGCTGCTTTGCCGCTGGGACAAGA
GACGCTGGCGCAAGATCCCCAAGCGCCCTGGCTCCGTGCACCGCACTCCCTCCCGCAAT
GCTGATAGTCCCCTCTCTGCATCCCTCCACCCAGTCCCCGGGAAAGCCGGTGGGAAG
AGGGCAGGGGCTGCATCCTCAGCCCCAGGGCCCTGCTCAGGCCTCACCTGGCTTCCAGG
ACCCTGGGTACCTTCTGGCAGCCAGAGAGACCCTGCCAATTTCCAGACTTCGCTA
TTCCCAGGCAGGGAGGAAACCCGGGAACTGGTTTTTCTGTTCCCTGCTGGGTGGGAAT
GCGCTCTTACCAGGAAGAAGGCCCGGGAGGAGGATCCGGGCTTTGGACTCCTTGTTTGC
CTTTAGGCAGGAAGTCAAGGAGCCAGCAGGGCGGGCCAGGAGAAAGAAGGCTTAACATTA
GTATTCCTTGGCCAGCAGCGGCCAGATTGCGGTGTGAGATGGTGCCCCCTGGGGGCA
CAGCCAGAAACTGAACTGGCCGCTGGGAGAAAAGCCAGATGACAGGGAGCTGGGGAATCC
CCTCGTTCATAGGCAGAGCCCGCCACCTGGGCCCTAGGCATACTCTCCAGGATTGTCC
ACAAATGTCTCAGAGGGTCCCTAGGTGGGTCAACTCCAAGGCAATGTCCAAGCATCAG
CAAGACAATGACTGGAAGGGTCCGGCTGGCTAGTCACATATCAAGTCCCAGGCAGC
AACAGGACCAGGAGCCAGGTGCTCTGACTGTCTACAATATCATTTTCTGGGAGTGGGA
GTCAAGTGTGCCGTGCTATCCAGCCGCAAATCCATACCCCTGCCAGAGAAGCCTCAGT
CCCTCCCTCCTGGCTCACAGCCACCACCTGGATGGATCTGCTCCATGCAGATCTAGCCAG
GCCTCCCGCATGTGCTGCCTCCGGCCCTGCCACACAGGCCTGGCCAGCCAGCAGG
TTCTCTCTGTGAGCTCCCCAATCCAACCCATGCATGGCCTCCAGCCACCCGGATCTCC
AGGCCAGCCTGGCCCCAAATGTTCTTTCTTTTCATCCTCAGCAAGTGTGAGTCTGTGA
ATAAAGCCACATAACCAGCGGCAAAAAAAAAAAAAAAAAAAAAA
    
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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for BC007740 unedited NGAGTCATCTTTTGTATACGACTCACTATAGGCGGCCGCGAATTCGCACGAGGGGCAGTG GGGTTGAGGACCCTACATACCCCTCTTCAGCCCCGTGGTGATGACTTCCCTGAGGAAG CCCTGTAGCGTGCCTGGAGGAAGGGGCTCTCAACCCAGCCCCACCTAGCCACCATGAA CACTTCAGCCCCACCTGCTGTACGCCCCAACATACCGTCCTGGCACCAGGAAAGGGTCC CTGGCAAGTGGCCTTCATTGGGATCACCACGGGCTCCTGTGCTAGCCACAGTGACAGG CAACCTGCTGGTACTCATCTCTTTCAAGGTCAACACGGAGCTCAAGACAGTCAATAACTA CTTCTGCTGAGCCTGGCCTGTGCTGACCTCATCATCGGTACCTTCTCCATGAACCTCTA TACCACGTACCTGCTCATGGGCCACTGGGCTCTGGGCACGCTGGCTTGTGACCTCTGGCT GGCCCTGGACTATGTGGCCAGCAATGCCTCCGTATGAATCTGCTGCTCATCAGCTTTGA CCGCTACTTCTCCGTGACTCGGCCCTGAGCTACCGTGCCAAGCGCACACCCCGCCGGGC AGCTCTGATGATCGGCCCTGGCTGGTTCCTTTGTGCTCTGGGCCCCAGCCATCCT CTTCTGGCAGTACCTGGTAGGGGAGCGGACAGTGTAGCTGGGCAGTGTACATCCAGTT CCTCTCCAGCCATCATCACCTTTGGCACAGCCATGGCTGCCTTCTACCTCCCTGTAC AGTCATGTGCACGCTCTACTGGCGCATCTACCGGAGACAGAGAACCAGCACGGGAGCT GGCAGCCCTTCAGGGCTCCGAGACGCCAGGCTAGGGGGTGGCAGCAGCACG
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	BC007740
<b>Insert Size:</b>	2574 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">BC007740.2</a> , <a href="#">AAH07740.1</a>
<b>RefSeq Size:</b>	2565 bp
<b>RefSeq ORF:</b>	1380 bp
<b>Locus ID:</b>	1128
<b>Cytogenetics:</b>	11q12.3
<b>Protein Families:</b>	Druggable Genome, GPCR, Transmembrane
<b>Protein Pathways:</b>	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 muscarinic cholinergic receptor 1 is involved in mediation of vagally-induced bronchoconstriction and in the acid secretion of the gastrointestinal tract. The gene encoding this receptor is localized to 11q13. [provided by RefSeq, Jul 2008]