

## Product datasheet for **SC126556**

### CHRM1 (NM\_000738) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CHRM1 (NM_000738) Human Untagged Clone
Tag:	Tag Free
Symbol:	CHRM1
Synonyms:	HM1; M1; M1R
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >OriGene ORF within SC126556 sequence for NM\_000738 edited (data generated by NextGen Sequencing)

```

ATGAACACTTCAGCCCCACCTGCTGTCAGCCCCAACATCACCGTCCTGGCACCAGGAAAG
GGTCCCTGGCAAGTGGCCTTCATTGGGATCACCACGGGCTCCTGTCGCTAGCCACAGTG
ACAGGCAACCTGCTGGTACTCATCTCTTTCAAGGTCAACACGGAGCTCAAGACAGTCAAT
AACTACTTCTGCTGAGCCTGGCCTGTGCTGACCTCATCATCGGTACCTTCTCCATGAAC
CTCTATACCACGTACCTGCTCATGGGCCACTGGGCTCTGGGCACGCTGGCTTGTGACCTC
TGGCTGGCCCTGGACTATGTGGCCAGCAATGCCTCCGTATGAATCTGCTGCTCATCAGC
TTTGACCGCTACTTCTCCGTGACTCGGCCCTGAGCTACCGTGCCAAGCGCACACCCCGC
CGGGCAGCTCTGATGATCGGCCTGGCCTGGCTGGTTTCCTTTGTGCTCTGGGCCCCAGCC
ATCCTCTTCTGGCAGTACCTGGTAGGGAGCGGACAGTGTAGCTGGGCAGTGTACATC
CAGTTCCTCTCCAGCCCATCATCACCTTTGGCACAGCCATGGCTGCCTTCTACCTCCCT
GTCACAGTCATGTGCACGCTCTACTGGCGCATCTACCGGAGACAGAGAACCAGCAGCG
GAGCTGGCAGCCCTTCAGGGCTCCGAGACGCCAGGCAAAGGGGGTGGCAGCAGCAGCAGC
TCAGAGAGGTCTCAGCCAGGGGCTGAGGGCTCACCAGAGACTCCTCCAGGCCGCTGCTGT
CGCTGCTGCCGGGCCCCAGGCTGCTGCAGGCCTACAGCTGGAAGGAAGAAGAGGAAGAG
GACGAAGGCTCCATGGAGTCCCTCACATCCTCAGAGGGAGAGGAGCCTGGCTCCGAAGTG
GTGATCAAGATGCCAATGGTGGACCCCGAGGCACAGGCCCCACCAAGCAGCCCCACGG
AGCTCCCCAAATACAGTCAAGAGGCCGACTAAGAAAGGGCGTGATCGAGCTGGCAAGGGC
CAGAAGCCCCGTGGAAGGAGCAGCTGGCCAAGCGGAAGACCTTCTCGCTGGTCAAGGAG
AAGAAGGGCGGCTCGGACCCTGAGTGCCATCCTCCTGGCCTTATCCTCACCTGGACACC
TACAACATCATGGTGTGGTGTCCACCTTCTGCAAGGACTGTGTTCCCGAGACCTGTGG
GAGCTGGGCTACTGGCTGTGCTACGTCAACAGCACCATCAACCCCATGTGCTACGCACT
TGCAACAAAGCCTTCCGGGACACCTTTCCGCTGCTGCTGCTTTGCCGCTGGGACAAGAGA
CGCTGGCGCAAGATCCCCAAGCGCCTGGCTCCGTGCACCGCACTCCCTCCGCCAATGC
TGA

```

Clone variation with respect to NM\_000738.2

**5' Read Nucleotide Sequence:** >OriGene 5' read for NM\_000738 unedited

```

TTTTGAATACNACTCACTATTGGCGGCCGGAATTCGGCACGAGGGGCAGTGGGGTTGAG
GACCCTACAGACCCTCTTCAGCCCCGTGGTATGACTTTCCCCTGAGGAAGCCGGGTAG
CGTGCCTGGAGGAAGGGGCTCTCCAACCCAGCCCCACCTAGCCACCATGAACACTTCAG
CCCCACCTGCTGTGAGCCCCAACATCACCGTCCTGGCACCAGGAAAGGGTCCCTGGCAAG
TGGCCTTATTGGGATCACCACGGGCTCCTGTCGCTAGCCACAGTGACAGGCAACCTGC
TGGTACTCATCTCTTTCAAGGTCAACACGGAGCTCAAGACAGTCAATAACTACTTCTGCT
TGAGCCTGGCCTGTGCTGACCTCATCATCGGTACCTTCTCCATGAACCTTATACCAGT
ACCTGCTCATGGCCACTGGGCTCTGGCACGCTGGCTTGTGACCTCTGGCTGGCCCTGG
ACTATGTGGCCAGCAATGCCTCCGTATGAATCTGCTGCTCATCAGCTTTGACCGTACT
TCTCCGTGACTCGGCCCTGAGTACCCTGCCAAGCGCACACNCCGCCGGGCAGCTCTTA
TGATCGGCCTGGCCTGGCTGGTTTCCTTTGTGCTCTGGGCCCCAGCCATCCTTCTCCTC
ANTAACCTTGTAGGGGAGCGGACAGTGTAGCTTGGCAGTGTACATCCAGTTCTCCTCC
CAGCCCATCATCACCTTGGCACAGCCCTGGCTGCCTTCTACTCCCTGTCACAGCATGGT
CACGCTTTATTGGCGCATCTACCGGAGACAGAGAACCAACACCGGAGCCGGGAACCTT

```

<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_000738 unedited AGNANGAGCACTGGGNGAGGGTCACAGGGATGCCACCCGGGCTCTGTTCAGGAAACAGCT ATGACCGCGGCCCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTGGCCGCTGGT TATGTGGCTTTATTACAGACTCAGCACTTGCTGAGGATGAAAGGAAAGAACATTTGGGG CCAGGCTGGGCCCTGGAGATCCGGGTGGCTGGGAGGCCATGCATGGGTTGGATTGGGGAGC TCACAGGAGAGAACCTGCTGGCTGGGCCAGGCCTGTGTGGGGCAGGGCCGAGGCAGGCA GCATGCCGGGAGGCTGGCTAGATCTGCATGGAGCAGATCCATCCAGGTGGTGGCTGTGAG CCAGGAGGGAGGGACTGAGGCTTCTCTGGGGCAGGGGTATGGATTTGCGGCTGGATAGC AGGCACACTTGACTCCCCTCCCAGGAAAATGATATTGTAGGACAGTCAGGACACCTGGC TCCTGGTCTGTGCTGCCTCGGGACTTGATATGTGACTAGCCAAGCCGGACCCTTCCAG TGTCAATTGCTTGTGCTGATGCTTGGACATTTGCCTTGGAGTTGACCCACCTAGGGACCCTC TGAGGACATTTGTGACAATCCTGGAGAGTATGCCTAGGGCCCAGGTGGGCGGGCTCTGC CTATGAAGCGAGGGGATCCCCAGCTCCCTGCATCTGGCTTTTCTCCCAGCGGCCAGTT CAGTTTCTGGCTGTGCCCCCAGGGGGCACCATCTCACACCGCAATCTGGGCCGCTGCTG GGCCAAGGAATACTTAATGTTAAGCCTTCTTTCTCCTGGCCCGCCCTGCTGGCTCCTGAC TTCTGCCCCTAAGGCAACAAGGGGTCAAAGCCCGGATCCTG
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_000738
<b>Insert Size:</b>	1500 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="#">NM_000738.2</a> , <a href="#">NP_000729.2</a>
<b>RefSeq Size:</b>	2863 bp
<b>RefSeq ORF:</b>	1383 bp
<b>Locus ID:</b>	1128
<b>UniProt ID:</b>	<a href="#">P11229</a>
<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]