

## Product datasheet for **RG205794**

### CHRM1 (NM\_000738) Human Tagged ORF Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids                      |
| Product Name:             | CHRM1 (NM_000738) Human Tagged ORF Clone |
| Tag:                      | TurboGFP                                 |
| Symbol:                   | CHRM1                                    |
| Synonyms:                 | HM1; M1; M1R                             |
| Mammalian Cell Selection: | Neomycin                                 |
| Vector:                   | pCMV6-AC-GFP (PS100010)                  |
| E. coli Selection:        | Ampicillin (100 ug/mL)                   |



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**ORF Nucleotide Sequence:**

>RG205794 representing NM\_000738  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGAACACTTCAGCCCCACTGTCTCAGCCCCAACATCACCGTCTGGCACCAGGAAAGGGTCCCTGGC  
 AAGTGGCCTTCATTGGGATCACACGGGCTCCTGTCGCTAGCCACAGTGACAGGCAACCTGCTGGTACT  
 CATCTCTTTCAAGGTCAACACGGAGCTCAAGACAGTCAATAACTACTTCTGCTGAGCCTGGCCTGTGCT  
 GACCTCATCATCGGTACCTTCTCCATGAACCTCTATACCACGTACCTGCTCATGGCCACTGGGCTCTGG  
 GCACGCTGGCTTGTGACCTCTGGCTGGCCCTGGACTATGTGGCCAGCAATGCCTCCGTCATGAATCTGCT  
 GCTCATCAGCTTTGACCCTACTTCTCCGTGACTCGGCCCTGAGCTACCGTGCCAAGCGCACACCCCGC  
 CGGGCAGCTCTGATGATCGGCCCTGGCTGGTGGTTTCTTTGTGCTCTGGGCCCGCCATCCTCTTCT  
 GGCAGTACCTGGTAGGGAGCGGACAGTGTAGCTGGCAGTGTACATCCAGTTCCTCTCCAGCCCAT  
 CATCACCTTTGGCACAGCCATGGCTGCCTTCTACCTCCCTGTACAGTCAATGTGCAGCTCTACTGGCGC  
 ATCTACCGGGAGACAGAGAACCAGCACGGGAGCTGGCAGCCCTTCAGGGCTCCGAGACGCCAGGCAAAAG  
 GGGGTGGCAGCAGCAGCAGCTCAGAGAGGTCTCAGCCAGGGGCTGAGGGCTCACCAGAGACTCCTCCAGG  
 CCGCTGCTGTCGCTGCTGCCGGGCCCCAGGCTGCTGCAGGCCTACAGCTGGAAGGAAGAAGAGGAAGAG  
 GACGAAGGCTCCATGGAGTCCCTCACATCCTCAGAGGGAGAGGAGCCTGGCTCCGAAGTGGTGATCAAGA  
 TGCCAATGGTGGACCCCGAGGCACAGGCCCCCAACAGCAGCCCCACGGAGCTCCCAAATACAGTCAA  
 GAGGCCGACTAAGAAAGGGCGTGATCGAGCTGGCAAGGGCCAGAAGCCCGTGGAAAGGAGCAGCTGGCC  
 AAGCGGAAGACCTTCTCGCTGGTCAAGGAGAAGAAGCGGCTCGGACCTGAGTGCCATCCTCCTGGCCT  
 TCATCCTCACCTGGACACCGTACAACATCATGGTGTGTTGCCACCTTCTGCAAGGACTGTGTTCCCGA  
 GACCTGTGGGAGCTGGGCTACTGGCTGTGCTACGTCAACAGCACCATCAACCCATGTGCTACGCACTC  
 TGCAACAAAGCCTTCCGGGACACCTTTCGCTGCTGCTGCTTTGCCGCTGGGACAAGAGACGCTGGCGCA  
 AGATCCCCAAGCGCCCTGGCTCCGTGCACCGCACTCCCTCCGCCAATGC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG205794 representing NM\_000738  
 Red=Cloning site Green=Tags(s)

MNTSAPPAVSPNITVLAPGKGPWQVAFIGITTLGLSLATVTGNLLVLISFKVNTLKTVNNYFLLSLACA  
 DLIIGTFSMNLYTTYLLMGHWALGTLACDLWLALDYVASNASVMNLLISFDRYFSVTRPLSYRAKRTPR  
 RAALMIGLAWLVSFVLWAPAILFWQYLVGERTVLAGQCYIQFLSQPIITFGTAMAAFYLPVTVMCTLYWR  
 IYRETENRARELAALQGSETPGKGGSSSSSERSQPGAEGSPETPPGRCCRCRAPRLQAYSWKEEEEE  
 DEGSMSLTSSEGESEVVIKMPMVDPEAQAPTKQPPRSPNTVKRPTKKGRDRAGKQKPRGKEQLA  
 KRKTFSLVKEKKAARTLSAILLAFILTWTPYNIMVLVSTFCKDCVPETLWELGYWLCYVNSTINPMCYAL  
 CNKAFRDTRFRLLLLCRWDKRRWRKIPKRPGSVHRTPSRQC

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_000738

**ORF Size:** 1380 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\\_000738.3](#)

**RefSeq Size:** 2863 bp

**RefSeq ORF:** 1383 bp

**Locus ID:** 1128

**UniProt ID:** [P11229](#)

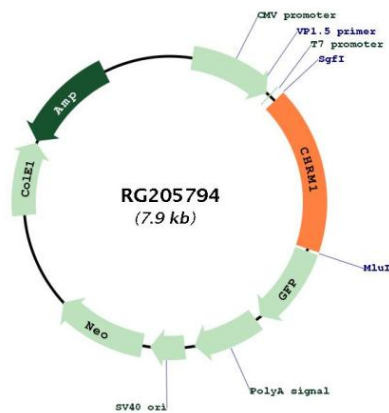
**Cytogenetics:** 11q12.3

**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 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]

**Product images:**



Circular map for RG205794