

# Muscarinic acetylcholine receptor M3 (CHRM3) Recombinant Protein | CHRM3 recombinant protein

Recombinant Human Muscarinic acetylcholine receptor M3 (CHRM3), partial

|                              |                                                                 |
|------------------------------|-----------------------------------------------------------------|
| CATALOG #<br><b>AAA18451</b> | HOST<br><b>E Coli or Yeast or Baculovirus or Mammalian Cell</b> |
|------------------------------|-----------------------------------------------------------------|

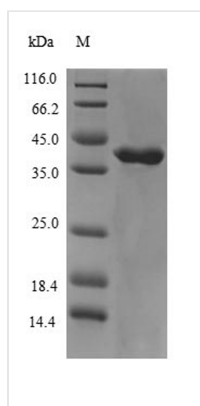
## PRODUCT SYNONYMS

Muscarinic acetylcholine receptor M3 (CHRM3); Recombinant Human Muscarinic acetylcholine receptor M3 (CHRM3); partial; CHRM3 recombinant protein

## PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                 |
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| Host                    | E Coli or Yeast or Baculovirus or Mammalian Cell                                                                                                                                                                                                                                |
| Purity/Purification     | Greater or equal to 85% purity as determined by SDS-PAGE.                                                                                                                                                                                                                       |
| Form/Format             | Lyophilized or liquid (Format to be determined during the manufacturing process)                                                                                                                                                                                                |
| Sequence Positions      | 253-492aa; partial                                                                                                                                                                                                                                                              |
| Sequence                | RIYKETEKRT KELAGLQASG TEAETENFVH PTGSSRSCSS YELQQQSMKR SNRRKYGRCH FWFTTKSWKP<br>SSEQMDQDHS SSDSWNNNDA AASLENSASS DEEDIGSETR AIYSIVLKLP GHSTILNSTK LPSSDNLQVP<br>EEELGMVDLE RKADKLQAQK SVDDGGSFPK SFSKLPIQLE SAVDTAKTSD VNSSVGKSTA TLPLSFKEAT<br>LAKRFALKTR SQITKRKRMS LVKEKKAQT |
| Preparation and Storage | Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.                                                                                                                                                                                          |

## IMAGES



SDS-PAGE

## ADDITIONAL INFORMATION

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| Related Product Information for CHRM3 recombinant protein | The muscarinic acetylcholine receptor mediates various cellular responses, including inhibition of adenylate cyclase, breakdown of phosphoinositides and modulation of potassium channels through the action of G proteins. Primary transducing effect is Pi turnover. |
| Product Categories/Family for CHRM3 recombinant protein   | Neuroscience                                                                                                                                                                                                                                                           |

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| References | <p>Distinct primary structures, ligand-binding properties and tissue-specific expression of four human muscarinic acetylcholine receptors.Peralta E.G., Ashkenazi A., Winslow J.W., Smith D.H., Ramachandran J., Capon D.J.EMBO J. 6:3923-3929(1987) Cloning and expression of the human and rat m5 muscarinic acetylcholine receptor genes.Bonner T.I., Young A.C., Brann M.R., Buckley N.J.Neuron 1:403-410(1988) Human-specific amino acid changes found in 103 protein-coding genes.Kitano T., Liu Y.-H., Ueda S., Saitou N.Mol. Biol. Evol. 21:936-944(2004) cDNA clones of human proteins involved in signal transduction sequenced by the Guthrie cDNA resource center (www.cdna.org) .Puhl H.L. III, Ikeda S.R., Aronstam R.S. The DNA sequence and biological annotation of human chromosome 1.Gregory S.G., Barlow K.F., McLay K.E., Kaul R., Swarbreck D., Dunham A., Scott C.E., Howe K.L., Woodfine K., Spencer C.C.A., Jones M.C., Gillson C., Searle S., Zhou Y., Kokocinski F., McDonald L., Evans R., Phillips K., Atkinson A., Cooper R., Jones C., Hall R.E., Andrews T.D., Lloyd C., Ainscough R., Almeida J.P., Ambrose K.D., Anderson F., Andrew R.W., Ashwell R.I.S., Aubin K., Babbage A.K., Bagguley C.L., Bailey J., Beasley H., Bethel G., Bird C.P., Bray-Allen S., Brown J.Y., Brown A.J., Buckley D., Burton J., Bye J., Carder C., Chapman J.C., Clark S.Y., Clarke G., Clee C., Cobley V., Collier R.E., Corby N., Coville G.J., Davies J., Deadman R., Dunn M., Earthrowl M., Ellington A.G., Errington H., Frankish A., Frankland J., French L., Garner P., Garnett J., Gay L., Ghorri M.R.J., Gibson R., Gilby L.M., Gillett W., Glithero R.J., Grafham D.V., Griffiths C., Griffiths-Jones S., Grocock R., Hammond S., Harrison E.S.I., Hart E., Haugen E., Heath P.D., Holmes S., Holt K., Howden P.J., Hunt A.R., Hunt S.E., Hunter G., Isherwood J., James R., Johnson C., Johnson D., Joy A., Kay M., Kershaw J.K., Kibukawa M., Kimberley A.M., King A., Knights A.J., Lad H., Laird G., Lawlor S., Leongamornlert D.A., Lloyd D.M., Loveland J., Lovell J., Lush M.J., Lyne R., Martin S., Mashreghi-Mohammadi M., Matthews L., Matthews N.S.W., McLaren S., Milne S., Mistry S., Moore M.J.F., Nickerson T., O'Dell C.N., Oliver K., Palmeiri A., Palmer S.A., Parker A., Patel D., Pearce A.V., Peck A.I., Pelan S., Phelps K., Phillimore B.J., Plumb R., Rajan J., Raymond C., Rouse G., Saenphimmachak C., Sehra H.K., Sheridan E., Shownkeen R., Sims S., Skuce C.D., Smith M., Steward C., Subramanian S., Sycamore N., Tracey A., Tromans A., Van Helmond Z., Wall M., Wallis J.M., White S., Whitehead S.L., Wilkinson J.E., Willey D.L., Williams H., Wilming L., Wray P.W., Wu Z., Coulson A., Vaudin M., Sulston J.E., Durbin R.M., Hubbard T., Wooster R., Dunham I., Carter N.P., McVean G., Ross M.T., Harrow J., Olson M.V., Beck S., Rogers J., Bentley D.R.Nature 441:315-321(2006) Antisense promoter of human L1 retrotransposon drives transcription of adjacent cellular genes.Speek M.Mol. Cell. Biol. 21:1973-1985(2001) Mutation of carboxyl-terminal threonine residues in human M3 muscarinic acetylcholine receptor modulates the extent of sequestration and desensitization.Yang J., Williams J.A., Yule D.I., Logsdon C.D.Mol. Pharmacol. 48:477-485(1995) Muscarinic acetylcholine receptor M3 mutation causes urinary bladder disease and a prune-belly-like syndrome.Weber S., Thiele H., Mir S., Toliat M.R., Sozeri B., Reutter H., Draaken M., Ludwig M., Altmuller J., Frommolt P., Stuart H.M., Ranjzad P., Hanley N.A., Jennings R., Newman W.G., Wilcox D.T., Thiel U., Schlingmann K.P., Beetz R., Hoyer P.F., Konrad M., Schaefer F., Nurnberg P., Woolf A.S.Am. J. Hum. Genet. 89:668-674(2011) The muscarinic M3 acetylcholine receptor exists as two differently sized complexes at the plasma membrane.Patowary S., Alvarez-Curto E., Xu T.R., Holz J.D., Oliver J.A., Milligan G., Raicu V.Biochem. J. 452:303-312(2013) Identification and structural determination of the M(3) muscarinic acetylcholine receptor basolateral sorting signal.Iverson H.A., Fox D. III, Nadler L.S., Klevit R.E., Nathanson N.M.J. Biol. Chem. 280:24568-24575(2005)</p> |
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NCBI AND UNIPROT INFORMATION

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|----------------------------------|----------------------------------------|
| NCBI GI #                        | 4502819                                |
| NCBI GeneID                      | 1131                                   |
| NCBI Accession #                 | NP_000731.1                            |
| NCBI GenBank Nucleotide #        | NM_000740.2                            |
| UniProt Accession #              | P20309; Q0VAJ8; Q4QRI3; Q5VXY2; Q9HB60 |
| Molecular Weight                 | 28.7 kDa                               |
| NCBI Official Full Name          | muscarinic acetylcholine receptor M3   |
| NCBI Official Synonym Full Names | cholinergic receptor, muscarinic 3     |
| NCBI Official Symbol             | CHRM3                                  |
| NCBI Official Synonym Symbols    | HM3; PBS; EGBRS                        |
| NCBI Protein Information         | muscarinic acetylcholine receptor M3   |
| UniProt Protein Name             | Muscarinic acetylcholine receptor M3   |
| UniProt Gene Name                | CHRM3                                  |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/chrm3-recombinant-protein-e-coli-or-yeast-or-baculovirus-or-mammalian-cell/18451>