

## Acetylcholine receptors (muscarinic) (version 2019.4) in the IUPHAR/BPS Guide to Pharmacology Database

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### Abstract

Muscarinic acetylcholine receptors (**nomenclature as agreed by the NC-IUPHAR Subcommittee on Muscarinic Acetylcholine Receptors [45]**) are GPCRs of the Class A, rhodopsin-like family where the endogenous agonist is [acetylcholine](#). In addition to the agents listed in the table [AC-42](#), its structural analogues [AC-260584](#) and [77-LH-28-1](#), [N-desmethylozapine](#), [TBPB](#) and [LuAE51090](#) have been described as functionally selective agonists of the M<sub>1</sub> receptor subtype *via* binding in a mode distinct from that utilized by non-selective agonists [[243](#), [242](#), [253](#), [155](#), [154](#), [181](#), [137](#), [11](#), [230](#)]. There are two pharmacologically characterised allosteric sites on muscarinic receptors, one defined by it binding [gallamine](#), [strychnine](#) and [brucine](#), and the other defined by the binding of [KT 5720](#), [WIN 62,577](#), [WIN 51,708](#) and [staurosporine](#) [[161](#), [162](#)].

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#### Receptors

##### [M<sub>1</sub> receptor](#)

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##### [M<sub>5</sub> receptor](#)

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