

Distribution and function of muscarinic receptor

Receptor sub type	Location	Function
M1	CNS, autonomic ganglia	Learning memory, Motor function
M2	Heart- Atrium, SA node Smooth muscle- GIT	Reduced contraction (Negative inotrophy) Reduced rate (Negative chonotrophy) Contraction
M3	Smooth muscle- Gut, Urinary bladder, bronchi Blood vessels Gastric cells Salivary gland Pancreatic beta cells Eye	Contraction Vasodilation Release of HCl Salivation Insulin secretion Miosis
M4	CNS	Autoreceptor (Inhibits secretion of Ach)
M5	CNS	Dilation of cerebral blood vessels

Distribution and function of nicotinic receptor

Receptor sub type	Location	Function
N _N	Autonomic ganglia	Depolarization (open Na ⁺ , K ⁺ ion channels)
N _M	Neuromuscular junction (Skeletal muscle)	Skeletal muscle contraction