Muscarinic M2 and M4 acetylcholine receptor intracellular signalling pathway

M2 and M4 are G\textsubscript{i} protein coupled: they deactivate adenylyl cyclase, and decrease the levels of cAMP.

Broadly speaking, these receptors are membrane stabilizers. Excitable tissues hyperpolarize, inward rectifying potassium currents start flowing, voltage-gated calcium channels are inhibited.

From Peck and Hill "Pharmacology for Anaesthesia and Intensive care" as well as the mighty "Handbook of Pharmacology and Physiology in Anaesthetic Practice" by Stoelting and Hillier. A