OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TA328608

CHRM1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	GST fusion protein with a sequence GSETPGKGGGSSSSSERSQP GAEGSPETPPGRCCRCCRAPRLLQAYSWKEEEEEDEGSMESLTSS EGEEPGSEVVIKMPMVDPEAQAPTKQPPRSSPNTVKRPTKKGRDR AGKGQKPRGKEQLAKRK, corresponding to amino acid residues 227-353 of human m1.3rd intracellular loop.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN3.
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	The serum was depleted of anti-GST antibodies by affinity chromatography on immobilized GST, and then anti-m1 was affinity purified on immobilized m1-GST.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	cholinergic receptor muscarinic 1
Database Link:	NP_000729 Entrez Gene 12669 MouseEntrez Gene 25229 RatEntrez Gene 1128 Human P11229

View online »

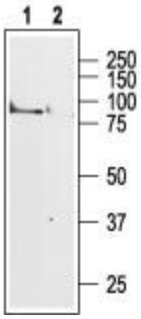
Background: The action of the neurotransmitter acetylcholine is mediated through two types of receptors, the ionotrophic nicotinic receptors and the metabotrophic muscarinic receptors. The muscarinic receptors belong to the superfamily of 7-TM G-protein-coupled receptors. Five subtypes of muscarinic receptors have been cloned and named m1-m5. The muscarinic receptors are widely distributed throughout the body, but are predominantly expressed within the parasympathetic nervous system and exerts both excitatory and inhibitory control over central and peripheral tissues. Muscarinic receptors participate in a number of physiological functions such as regulation of heart rate, muscle contraction, cognition, sensory processing and motor control. They also participate in learning and memory processing. The m1 receptors are the most abundant muscarinic subtype in the cortex and striatum. m1 receptors were also localized in the myenteric plexus where they function as autoreceptors to enhance the release of Ach from the nerves. The m1, m3 and m5 receptors, which are coupled to Gq/11 proteins, can protect cells from undergoing apoptosis induced by DNA damage. The signaling mechanism that mediates this anti-apoptotic response is still poorly understood. However, it was recently reported that a poly-basic motif in the C-terminus tail of the m1, m3 and m5 receptors is an essential element for the anti-apoptotic response of those receptors.

Synonyms: HM1; M1; M1R

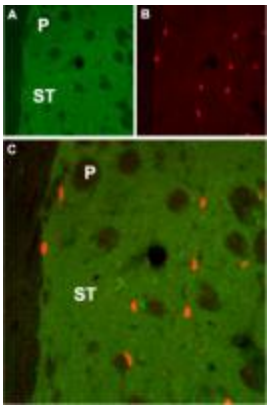
Protein Families: Druggable Genome, GPCR, Transmembrane

Protein Pathways: Calcium signaling pathway, Neuroactive ligand-receptor interaction, Regulation of actin cytoskeleton

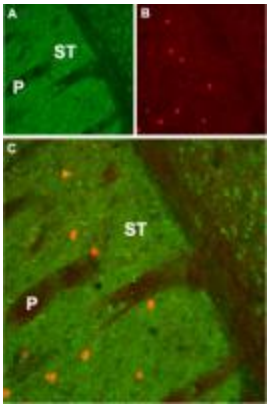
Product images:



Western blot analysis of rat brain membranes: 1. Anti-M1 Muscarinic Receptor antibody, (1:200). 2. Anti-M1 Muscarinic Receptor antibody, preincubated with the control fusion protein antigen.



Expression of M1 in rat striatum. Immunohistochemical staining of rat striatum (ST) using Anti-M1 Muscarinic Receptor antibody. A. M1 Muscarinic Receptor appears in the striatum (green). B. Staining of interneurons with mouse anti-parvalbumin (PV, red). C. Confocal merge of M1 Muscarinic Receptor and PV demonstrates localization of PV expressing neurons in the striatal matrix; not in striatal patches (P).



Expression of M1 in mouse striatum. Immunohistochemical staining of mouse striatum (ST) using Anti-M1 Muscarinic Receptor antibody. A. M1 Muscarinic Receptor appears in the striatum (green). B. Staining of interneurons with mouse anti-parvalbumin (PV, red). C. Confocal merge of M1 Muscarinic Receptor and PV demonstrates localization of PV expressing neurons in the striatal matrix; not in striatal patches (P).