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CHRM2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14420c

Product Information

Application	WB, E
Primary Accession	P08172
Other Accession	P10980, P06199, Q9ERZ4, P41985, NP_000730.1, NP_001006628.1
Reactivity	Human
Predicted	Bovine, Mouse, Pig, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34390
Calculated MW	51715
Antigen Region	336-364

Additional Information

Gene ID	1129
Other Names	Muscarinic acetylcholine receptor M2, CHRM2
Target/Specificity	This CHRM2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 336-364 amino acids from the Central region of human CHRM2.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CHRM2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CHRM2
Function	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 adenylate cyclase inhibition. Signaling promotes phospholipase C activity, leading to the release of inositol trisphosphate (IP3); this then triggers calcium ion release into the cytosol.
Cellular Location	Cell membrane; Multi-pass membrane protein. Postsynaptic cell membrane; Multi-pass membrane protein. Note=Phosphorylation in response to agonist binding promotes receptor internalization {ECO:0000250|UniProtKB:P06199}

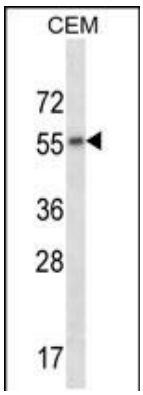
Background

The muscarinic cholinergic receptors belong to a larger family of G protein-coupled receptors. The functional diversity of these receptors is defined by the binding of acetylcholine to these receptors and includes cellular responses such as adenylate cyclase inhibition, phosphoinositide degeneration, and potassium channel mediation. Muscarinic receptors influence many effects of acetylcholine in the central and peripheral nervous system. The muscarinic cholinergic receptor 2 is involved in mediation of bradycardia and a decrease in cardiac contractility. Multiple alternatively spliced transcript variants have been described for this gene.

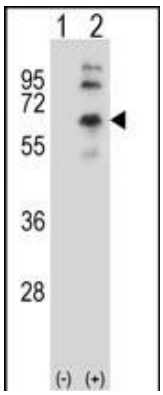
References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Ruano, G., et al. Pharmacogenomics 11(7):959-971(2010)
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Cannon, D.M., et al. Mol. Psychiatry (2010) In press :
Bosker, F.J., et al. Mol. Psychiatry (2010) In press :

Images



CHRM2 Antibody (Center) (Cat. #AP14420c) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the CHRM2 antibody detected the CHRM2 protein (arrow).



Western blot analysis of CHRM2 (arrow) using rabbit polyclonal CHRM2 Antibody (Center) (Cat. #AP14420c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the CHRM2 gene.