

Basic Information

Product Name	Anti-CHRM1 Antibody	
Gene Name	CHRM1	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, FCM	
Contents	500 ug/ml antibody with PBS , 0.02% NaN3 , 1 mg BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence of human Muscarinic Acetylcholine Receptor 1/CHRM1(RGKEQLAKRKTFSLVKEKKAARTL).	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	55KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 Flow cytometry (FCM): 1-3 μ g/1x10 ⁶ cells (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

The muscarinic acetylcholine receptor M1,also known as the cholinergic receptor,muscarinic 1,is a muscarinic receptor that in humans is encoded by the CHRM1 gene. 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 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 1 is involved in mediation of vagally-induced bronchoconstriction and in the acid secretion of the gastrointestinal tract. The gene encoding this receptor is localized to 11q13.

Selected Validation Data

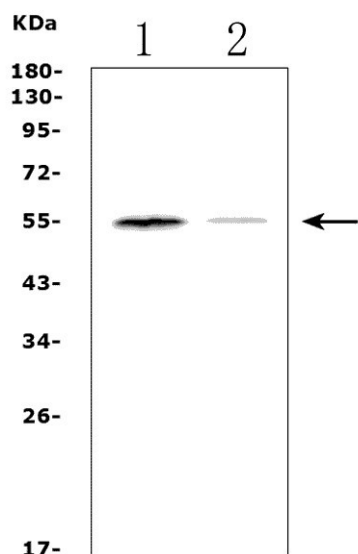


Figure 1. Western blot analysis of CHRM1 using anti-CHRM1 antibody (A04081). The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat C6 whole cell lysates, Lane 2: mouse Neuro-2A whole cell lysates. Use rabbit anti-CHRM1 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for CHRM1 at approximately 55KD. The expected band size for CHRM1 is at 51KD.

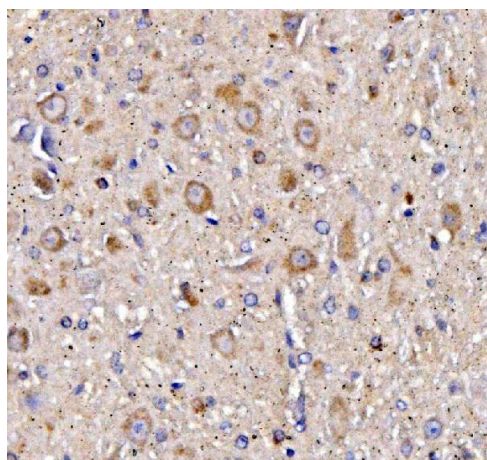


Figure 2. IHC analysis using anti-CHRM1 antibody (A04081). detected in paraffin-embedded section of mouse brain tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

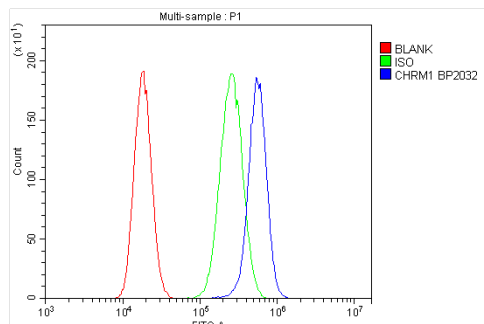


Figure 4. Flow cytometry analysis of PC-3 cell (1x10⁶) DyLight 488 conjugated goat anti-rabbit IgG (blue) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG DyLight 488. Unlabelled sample (Red line).