

### CHRM2 Antibody

Purified Mouse Monoclonal Antibody (Mab) Catalog # AM8445b

# Specification

# CHRM2 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Antigen Region IHC-P, WB, IF, FC,E <u>P08172</u> Human, Mouse Mouse Monoclonal IgG1,κ Recombinant Protein

# CHRM2 Antibody - Additional Information

Gene ID 1129

**Other Names** Muscarinic acetylcholine receptor M2, CHRM2

**Target/Specificity** This antibody is generated from a mouse immunized with a recombinant protein.

Dilution IHC-P~~1:25 WB~~1:500 IF~~1:25 FC~~1:25 E~~Use at an assay dependent concentration.

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

**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 is for research use only and not for use in diagnostic or therapeutic procedures.

### CHRM2 Antibody - 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}

# CHRM2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# CHRM2 Antibody - Images



Fluorescent image of SH-SY5Y cells stained with CHRM2 Antibody (Cat#AM8445b ). AM8445b was diluted at 1:25 dilution. An Alexa Fluor® 488-conjugated goat anti-mouse IgG at 1:400 dilution was used as the secondary antibody (green). DAPI was used to stain the cell nuclear (blue).





Western blot analysis of lysates from SH-SY5Y cell line, human brain, mouse brain tissue(from left to right), using CHRM2 Antibody(Cat. #AM8445b). AM8445b was diluted at 1:500 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:3000 dilution was used as the secondary antibody. Lysates at  $20\mu$ g per lane.



Immunohistochemical analysis of paraffin-embedded H. brain section using CHRM2(Cat#AM8445b ). AM8445b was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.





Immunohistochemical analysis of paraffin-embedded H. heart section using CHRM2 (Cat#AM8445b ). AM8445b was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.



Overlay histogram showing SH-SY5Y cells stained with AM8445b (green line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG (166821) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was mouse IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10,000 events was performed.

# CHRM2 Antibody - Background

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.

### CHRM2 Antibody - References

Bonner T.I., et al.Science 237:527-532(1987). Peralta E.G., et al.EMBO J. 6:3923-3929(1987). Puhl H.L. III, et al.Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases. Kitano T., et al.Mol. Biol. Evol. 21:936-944(2004). Gurevich V.V., et al.J. Biol. Chem. 270:720-731(1995).

