10320 Camino Santa Fe, Suite A
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CHRM2 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8445b

Specification

CHRM2 Antibody - Product Information

Application	**IHC-P, WB, IF, FC,E**
Primary Accession	P08172
Reactivity	**Human, Mouse**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1,κ**
Antigen Region	**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 Muscarinic receptor for acetylcholine, a neurotransmitter found in the brain, neuromuscular junctions and the autonomic ganglia (PubMed:24256733, PubMed:3443095,

PubMed:36690613). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors, such as adenylate cyclase (PubMed:36690613). CHRM2 is coupled to G(i)/G(o) (GNAI1 or GNAO1) G proteins and mediates signaling by inhibiting adenylate cyclase activity (PubMed:36690613).

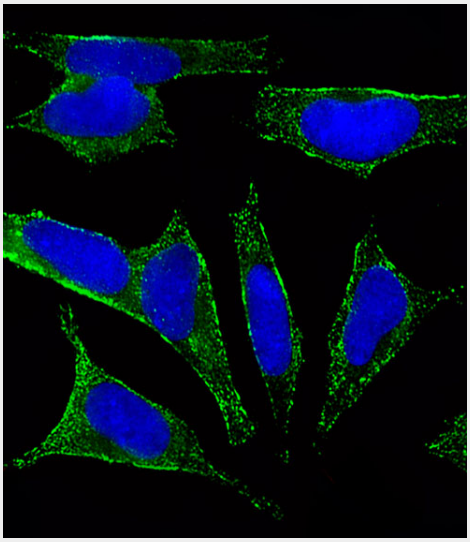
Cellular Location
Cell membrane; Multi-pass membrane protein. Postsynaptic cell membrane; Multi-pass membrane protein. Note=Phosphorylation in response to agonist binding promotes receptor internalization {ECO:0000250|UniProtKB:P06199}

CHRM2 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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).

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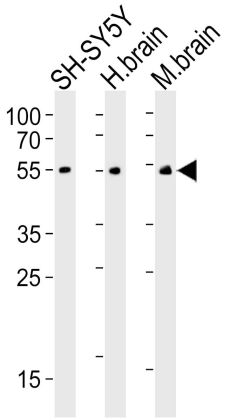
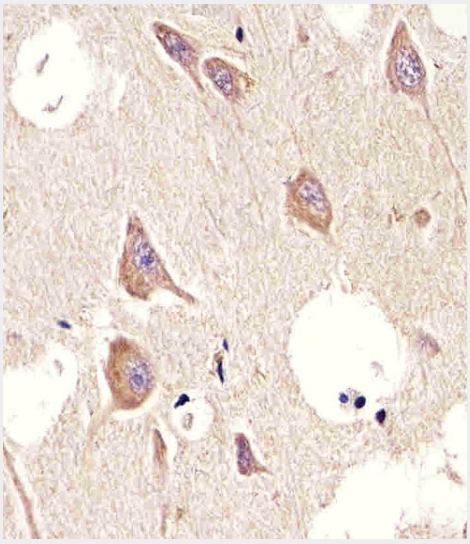
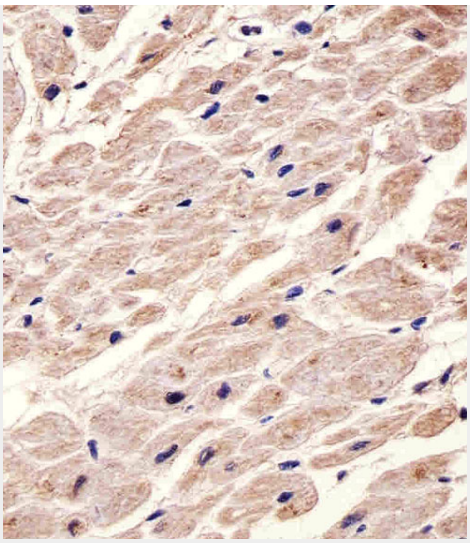


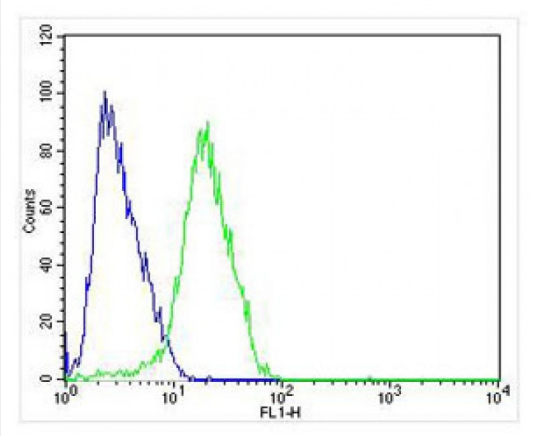
Western blot analysis of lysates from SH-SY5Y cell line, human brain, mouse brain tissue(from left to right), using CHRM2 Antibody(Cat. #AM8445b). AM8445b was diluted at 1:500 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:3000 dilution was used as the secondary antibody. Lysates at 20µg per lane.



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 37ºC. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG (166821) at 1/200 dilution for 40 min at 37ºC. 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

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Gurevich V.V.,et al.J. Biol. Chem. 270:720-731(1995).

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