

## CHRM2 Antibody

Purified Mouse Monoclonal Antibody (Mab)  
Catalog # AM8445b

### Specification

#### CHRM2 Antibody - Product Information

|                   |                        |
|-------------------|------------------------|
| Application       | IF, WB, IHC-P, FC,E    |
| Primary Accession | <a href="#">P08172</a> |
| Reactivity        | Human, Mouse           |
| Host              | Mouse                  |
| Clonality         | Monoclonal             |
| Isotype           | IgG1, $\kappa$         |
| 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

IF~~1:25  
WB~~1:500  
IHC-P~~1:25  
FC~~1:25

#### 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

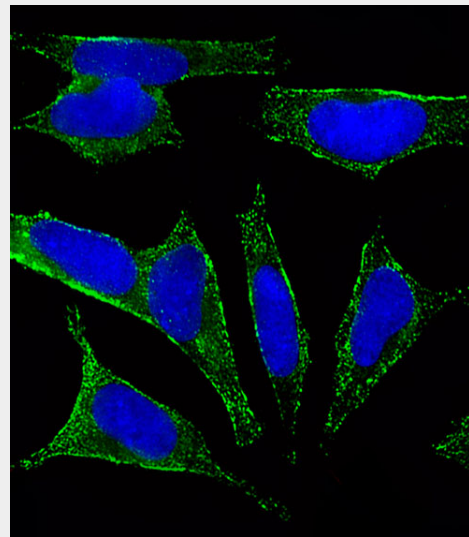
CHRM2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### CHRM2 Antibody - Protein Information

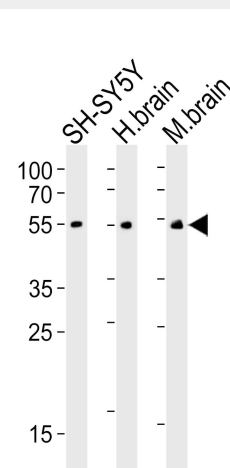
Name CHRM2

#### Function

The muscarinic acetylcholine receptor mediates various cellular responses, including inhibition of adenylate cyclase, breakdown of



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 20µg per lane.

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.

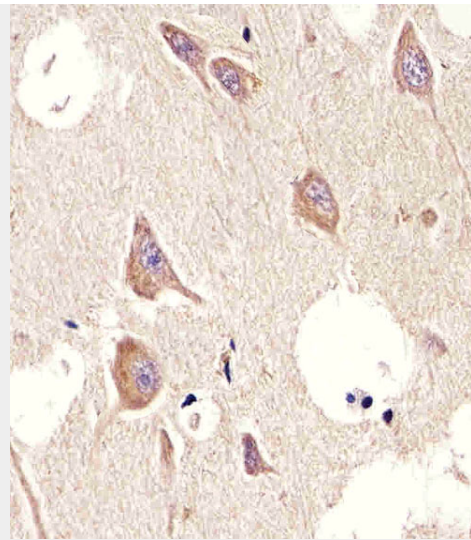
#### Cellular Location

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

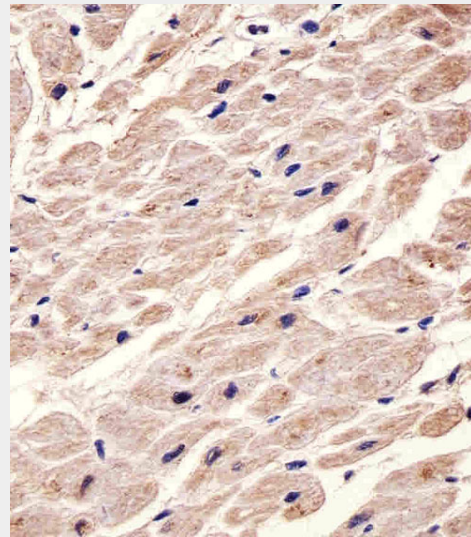
### CHRM2 Antibody - Protocols

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

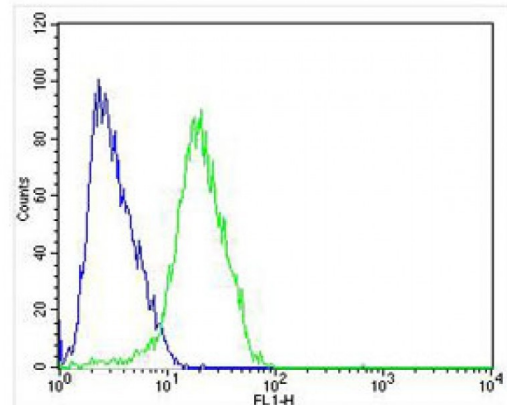
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



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 incubated 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<sup>6</sup> 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).  
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Kitano T.,et al.Mol. Biol. Evol. 21:936-944(2004).  
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