

# CHRM2 Antibody

Purified Mouse Monoclonal Antibody (Mab)

Catalog # AW5457

## Product Information

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<b>Application</b>	IHC-P, IF, WB, FC
<b>Primary Accession</b>	<a href="#">P08172</a>
<b>Reactivity</b>	Human, Mouse
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Calculated MW</b>	51715
<b>Isotype</b>	IgG1, $\kappa$
<b>Antigen Source</b>	HUMAN

## Additional Information

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<b>Gene ID</b>	1129
<b>Other Names</b>	Muscarinic acetylcholine receptor M2, CHRM2
<b>Dilution</b>	IHC-P~~1:100~500 IF~~1:25 WB~~1:1000 FC~~1:25
<b>Target/Specificity</b>	This antibody is generated from a mouse immunized with a recombinant protein.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	CHRM2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	CHRM2
<b>Function</b>	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}

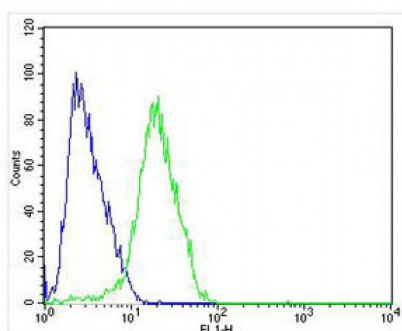
## Background

The muscarinic 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.

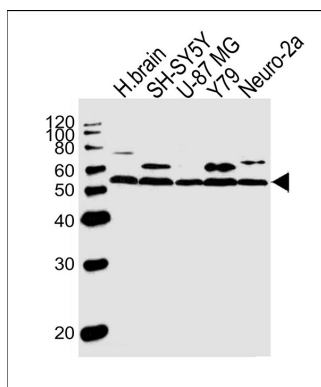
## References

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).

## Images

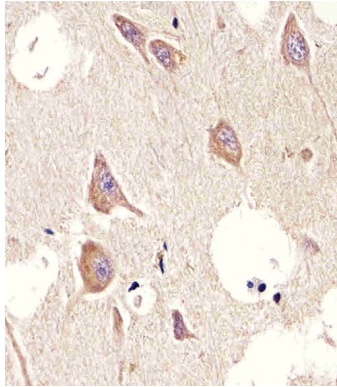
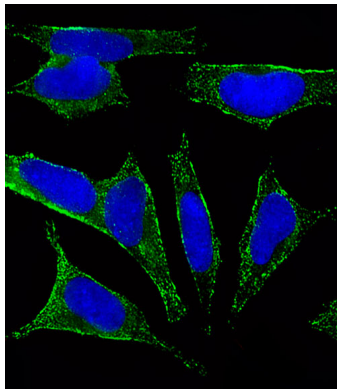


Overlay histogram showing SH-SY5Y cells stained with (green line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (, 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.

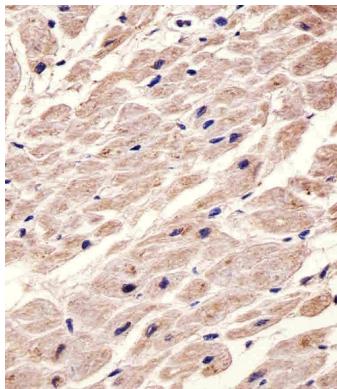


All lanes : Anti-CHRM2 Antibody at 1:1000 dilution Lane 1: human brain lysates Lane 2: SH-SY5Y whole cell lysates Lane 3: U-87 MG whole cell lysates Lane 4: Y79 whole cell lysates Lane 5: Neuro-2a whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 52 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Fluorescent image of SH-SY5Y cells stained with CHRM2 Antibody (Cat#AW5457 ). AW5457 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).



Immunohistochemical analysis of paraffin-embedded H. brain section using CHRM2(Cat#AW5457 ). AW5457 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#AW5457 ). AW5457 was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.