10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CHRM2 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AW5457

Specification

CHRM2 Antibody - Product Information

Application	**WB, IF, IHC-P, FC,E**
Primary Accession	P08172
Reactivity	**Human, Mouse**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**H=52;M=52 KDa**
Isotype	**IgG1,κ**
Antigen Source	**HUMAN**

CHRM2 Antibody - Additional Information

Gene ID 1129

Other Names
Muscarinic acetylcholine receptor M2, CHRM2

Dilution
WB~~1:1000
IF~~1:25
IHC-P~~1:25
FC~~1:25

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

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.

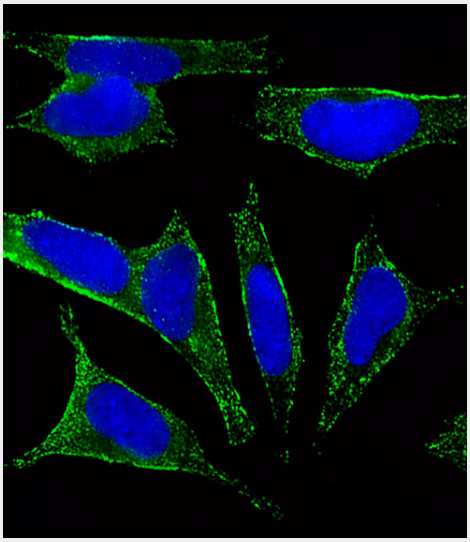
Cellular Location
Cell membrane; Multi-pass membrane protein. Postsynaptic cell membrane; Multi-pass membrane protein. Note=Phosphorylation in response to agonist binding promotes receptor internalization {ECO:0000250|UniProtKB:P06199}

CHRM2 Antibody - Protocols

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

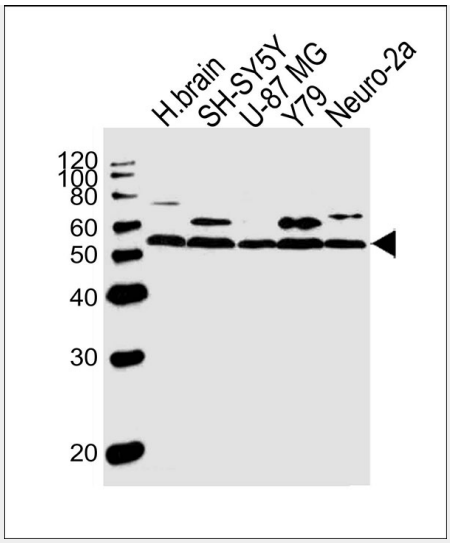
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CHRM2 Antibody - Images

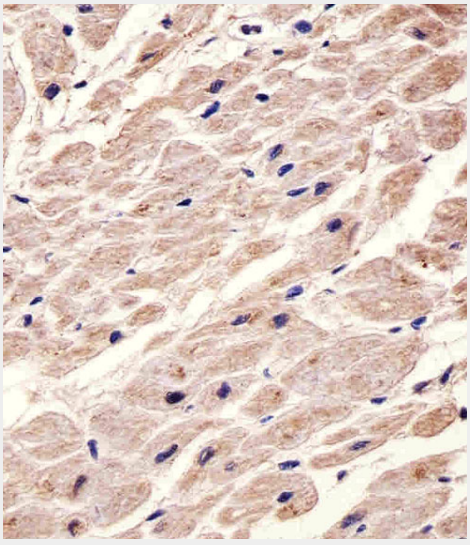


Fluorescent image of SH-SY5Y cells stained with CHRM2 Antibody (Cat#AW5457). AW5457 was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-mouse lgG at 1:400 dilution was used as the secondary antibody (green). DAPI was used to stain the cell nuclear (blue).

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

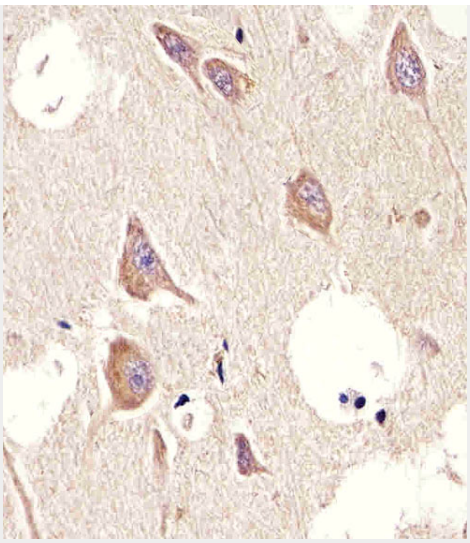


All lanes : Anti-CHRM2 Antibody at 1:1000 dilution Lane 1: human brain lysates Lane 2: SH-SY5Y whole cell lysates Lane 3: U-87 MG whole cell lysates Lane 4: Y79 whole cell lysates Lane 5: Neuro-2a whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Mouse IgG, (H+L),Peroxidase conjugated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

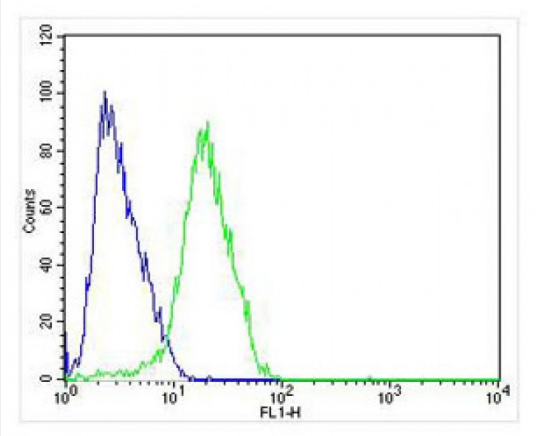


Immunohistochemical analysis of paraffin-embedded H. heart section using CHRM2 (Cat#AW5457). AW5457 was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



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.



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 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

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).