

Mouse Anti-CHRM2 antibody

SLM-51598M

Product Name CHRM2

Chinese Name 毒蕈碱型乙酰胆碱受体单克隆抗体

Alias

7TM receptor; Acetylcholine receptor, muscarinic, 2; Acm2; Cholinergic receptor muscarinic 2; receptor, muscarinic 2, cardiac; Cholinergic receptor, muscarinic 2, isoform a; Cholinergic receptor muscarinic 2a; Cholinergic receptor, muscarinic 2, isoform a; CHRM 2; chrm2a; CM2; FLJ4324 HM2; M2; M2 muscarinic receptor; MGC120006; MGC120007; ACM2_HUMAN; Muscarinic acetylcholine receptor M2; Muscarinic M2 receptor; Acetylcholine receptor(M2).

Research Area

Cell biology The cell membrane 受体

Immunogen Species

Mouse

Clonality

Monoclonal

Clone NO.

N8F12

React Species

Human,Mouse

Applications

WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:50-200,IF=1:100-500,Flow-Cytometry
(Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight

52kDa

Cellular localization

The cell membrane

Form

Liquid

Concentration 1mg/ml

immunogen

Recombinant human ChRM2.

Lsotype

IgG1, κ

Purification

affinity purified by Protein G

Buffer Solution

1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage

Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

**Attention**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed

[PubMed](#)

The muscarinic cholinergic receptors belong to a larger family of G protein-coupled receptors. The functional diversity of these receptors is defined by the binding of acetylcholine to these receptors, which includes cellular responses such as adenylate cyclase inhibition, phosphoinositide degradation, and potassium channel mediation. Muscarinic receptors influence many effects of acetylcholine in the peripheral nervous system. The muscarinic cholinergic receptor 2 is involved in mediation of bradycardia and a decrease in cardiac contractility. Multiple alternatively spliced transcript variants have been identified for this gene. [provided by RefSeq, Jul 2008]

Function:

The muscarinic acetylcholine receptor mediates various cellular responses, including inhibition of adenylate cyclase, breakdown of phosphoinositides and modulation of potassium channels through the activation of G proteins. Primary transducing effect is adenylate cyclase inhibition.

Subunit:

Interacts with ARRB1 and ARRB2. Interacts with GNB2L1/RACK1; the interaction regulates receptor internalization.

Subcellular Location:

Cell membrane; Multi-pass membrane protein. Cell junction, synapse, postsynaptic cell membrane. Multi-pass membrane protein.

Product Detail**DISEASE:**

Genetic variations in CHRM2 can influence susceptibility to major depressive disorder (MDD) [MIM:608516]. MDD is one of the most common psychiatric disorders. MDD is a complex trait characterized by one or more major depressive episodes without a history of manic, mixed, or hypomanic episodes. A major depressive episode is characterized by at least 2 weeks during which there is a noticeable clear worsening of either depressed mood or loss of interest or pleasure in nearly all activities. For diagnosis, additional symptoms must also be present including changes in appetite, weight, sleep, and psychomotor activity; decreased energy; feelings of worthlessness or guilt; difficulty thinking, concentrating, or making decisions; or recurrent thoughts of death or suicidal ideation, plans, or attempts. The episode must be accompanied by distress or impairment in social, occupational, or other important areas of functioning.

Similarity:

Belongs to the G-protein coupled receptor 1 family. Muscarinic acetylcholine receptor subfamily 2, class A, member 2 sub-subfamily.

SWISS:

P08172

Gene ID:

1129

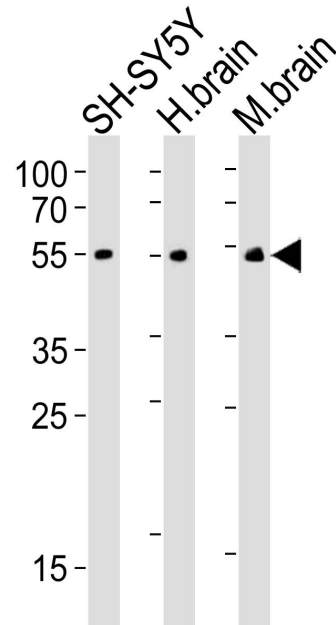
Database links:

[Entrez Gene: 1129](#) Human

[Entrez Gene: 243764](#) Mouse

[SwissProt: P08172](#) Human

**Product
Picture**



Sample:

Lane 1: SH-SY5Y cell lysates

Lane 2: Human brain tissue lysates

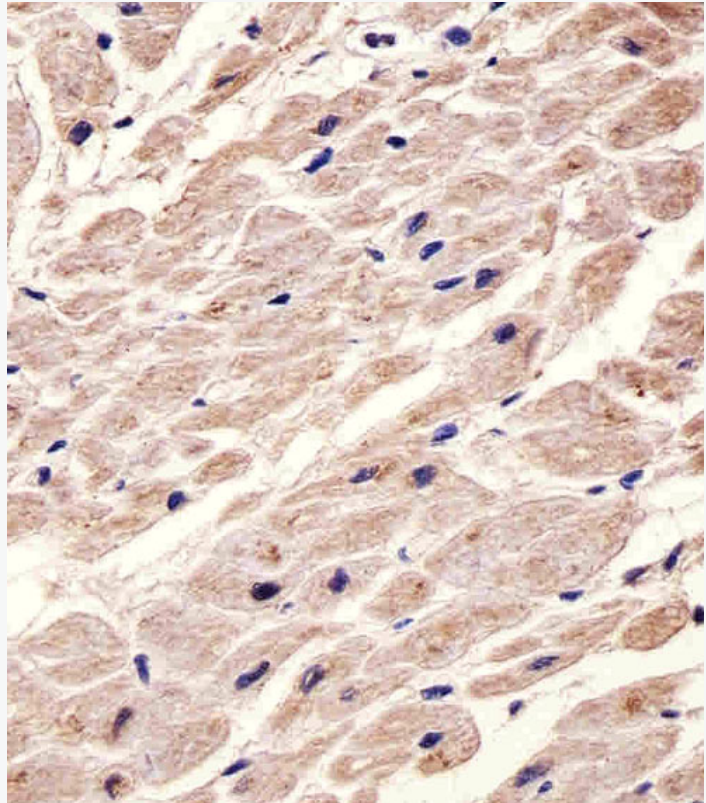
Lane 3: Mouse brain tissue lysates

Primary: Anti-CHRM2 (SLM-51598M) at 1/1000 dilution

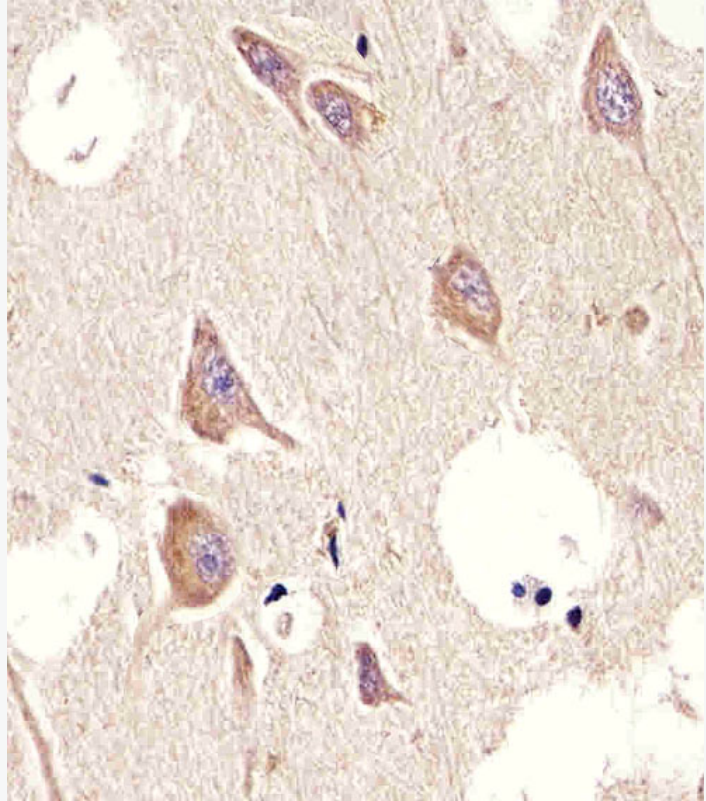
Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution

Predicted band size: 52 kD

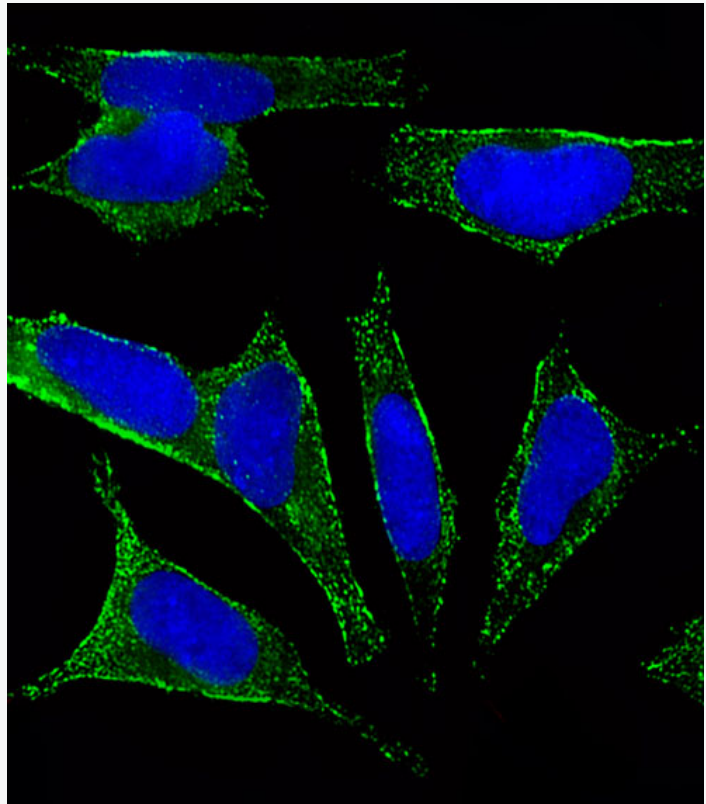
Observed band size: 55 kD



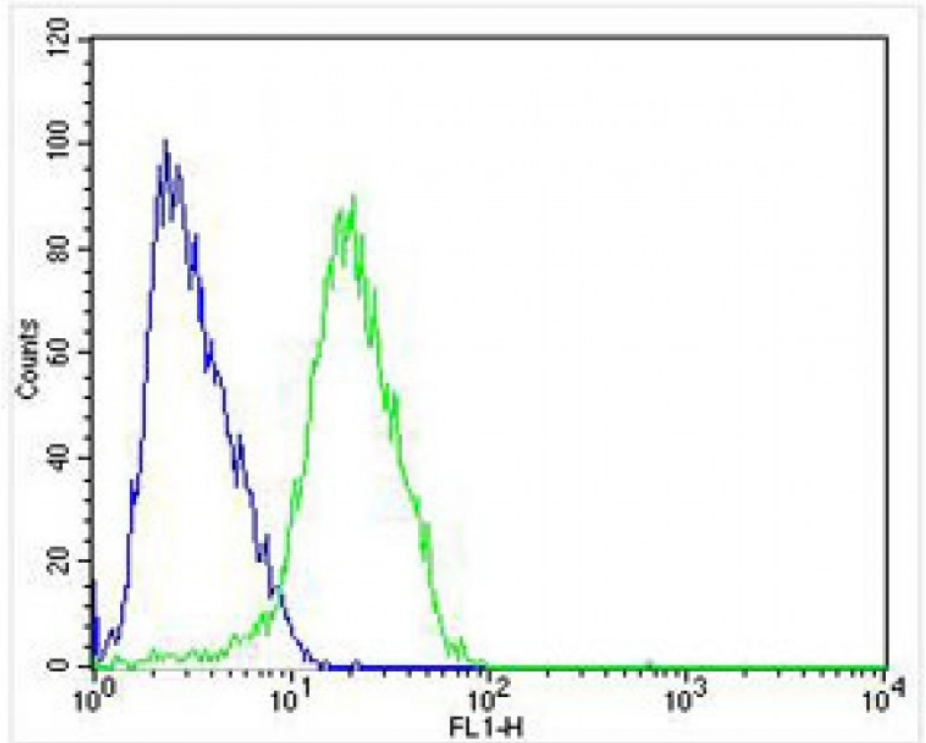
Paraformaldehyde-fixed, paraffin embedded (Human heart section); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (1:1000) Monoclonal Antibody, Unconjugated (SLM-51598M) at 1:200 overnight at 4°C, followed by secondary antibody incubation according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Human brain section); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (C) Monoclonal Antibody, Unconjugated (SLM-51598M) at 1:200 overnight at 4°C, followed by DAB staining according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.



SH-SY5Y cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; BSA (1%) in PBS buffer (normal goat serum) at 37°C for 20 min; Antibody incubation with (CHRM2) monoclonal antibody, Unconjugated (SLM-51598M) 1:25, 90 minutes at 37°C; followed by a conjugated anti-mouse IgG antibody at 37°C for 90 minutes, DAPI (blue) was used to stain the cell nuclei.



Blank control: SH-SY5Y.

Primary Antibody (green line): Mouse Anti-CHRM2 antibody (SLM-51598M)

Dilution: 1:25;

Isotype Control Antibody (blue line): Mouse IgG Secondary Antibody : Goat anti-mouse IgG

Dilution: 1:400 Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 95% ice-cold methanol for 20 min at -20°C. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 1 hour at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition



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20,000 events was performed.