

## Product datasheet

# Anti-Muscarinic Acetylcholine Receptor 2/CM2 antibody [EPR4568] ab109226

Recombinant RabMAb

★★★★★ 1 Abreviews 9 References 3 Images

### Overview

<b>Product name</b>	Anti-Muscarinic Acetylcholine Receptor 2/CM2 antibody [EPR4568]
<b>Description</b>	Rabbit monoclonal [EPR4568] to Muscarinic Acetylcholine Receptor 2/CM2
<b>Host species</b>	Rabbit
<b>Specificity</b>	Please note: blast analysis of the immunogen sequence for ab109226 shows 64% homology with the Muscarinic Acetylcholine Receptor 3, therefore some reactivity with this receptor subtype may be possible.
<b>Tested applications</b>	<b>Suitable for:</b> IP, WB, IHC-P <b>Unsuitable for:</b> Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: SH-SY5Y, fetal brain, U87-MG, Neuro-2a, and Y79 lysates IHC-P: Human brain tissue IF: SH-SY5Y cells
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Frozen Stock (-20C). Shelf life 12 months.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant

<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR4568
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab109226 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

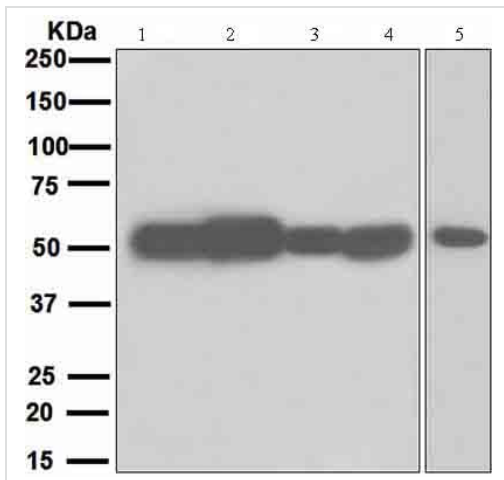
Application	Abreviews	Notes
<b>IP</b>		Use at an assay dependent concentration.
<b>WB</b>		1/1000 - 1/10000. Detects a band of approximately 52 kDa (predicted molecular weight: 52 kDa).
<b>IHC-P</b>	★★★★★ (1)	1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

**Application notes** Is unsuitable for Flow Cyt.

## Target

<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.
<b>Involvement in disease</b>	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 new onset or clear worsening of either depressed mood or loss of interest or pleasure in nearly all activities. Four 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.
<b>Sequence similarities</b>	Belongs to the G-protein coupled receptor 1 family. Muscarinic acetylcholine receptor subfamily. CHRM2 sub-subfamily.
<b>Cellular localization</b>	Cell membrane. Cell junction > synapse > postsynaptic cell membrane.

## Images



Western blot - Anti-Muscarinic Acetylcholine Receptor 2/CM2 antibody [EPR4568] (ab109226)

**All lanes :** Anti-Muscarinic Acetylcholine Receptor 2/CM2 antibody [EPR4568] (ab109226) at 1/1000 dilution

**Lane 1 :** SH-SY5Y lysate

**Lane 2 :** Fetal brain lysate

**Lane 3 :** U87-MG lysate

**Lane 4 :** Neuro-2a lysate

**Lane 5 :** Y79 lysates

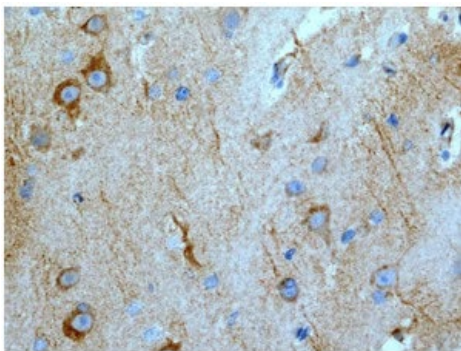
Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** Standard HRP labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 52 kDa

**Observed band size:** 52 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Muscarinic Acetylcholine Receptor 2/CM2 antibody [EPR4568] (ab109226)

Immunohistochemical analysis of paraffin-embedded Human brain tissue using ab109226 at 1/100.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Muscarinic Acetylcholine Receptor 2/CM2 antibody [EPR4568] (ab109226)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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