


Anti-Muscarinic Acetylcholine Receptor 2/CM2 antibody [EPR4568] - BSA and Azide free ab247798

Recombinant RabMAb

3 Images

Overview

Product name	Anti-Muscarinic Acetylcholine Receptor 2/CM2 antibody [EPR4568] - BSA and Azide free
Description	Rabbit monoclonal [EPR4568] to Muscarinic Acetylcholine Receptor 2/CM2 - BSA and Azide free
Host species	Rabbit
Specificity	Please note: blast analysis of the immunogen sequence for this antibody shows 64% homology with the Muscarinic Acetylcholine Receptor 3, therefore some reactivity with this receptor subtype may be possible.
Tested applications	Suitable for: IHC-P, WB Unsuitable for: Flow Cyt
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
General notes	<p>ab247798 is the carrier-free version of ab109226.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production

For more information [see here](#).

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb[®] patents](#).

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4568
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab247798 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
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Detects a band of approximately 52 kDa (predicted molecular weight: 52 kDa).

Application notes Is unsuitable for Flow Cyt.

Target

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.

Involvement in 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 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.

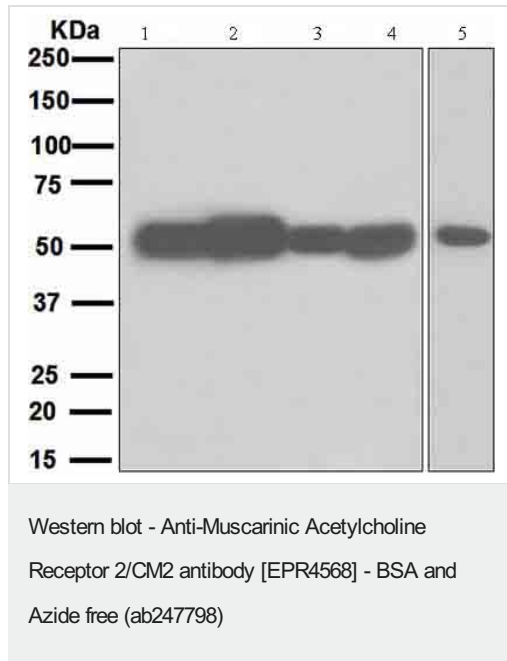
Sequence similarities

Belongs to the G-protein coupled receptor 1 family. Muscarinic acetylcholine receptor subfamily. CHRM2 sub-subfamily.

Cellular localization

Cell membrane. Cell junction > synapse > postsynaptic cell membrane.

Images



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

Lane 1 : SH-SY5Y cell lysate

Lane 2 : Fetal brain tissue lysate

Lane 3 : U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) cell lysate

Lane 4 : Neuro-2a lysate

Lane 5 : Y79 (Human retinoblastoma cell line) cell lysate

Lysates/proteins at 10 µg per lane.

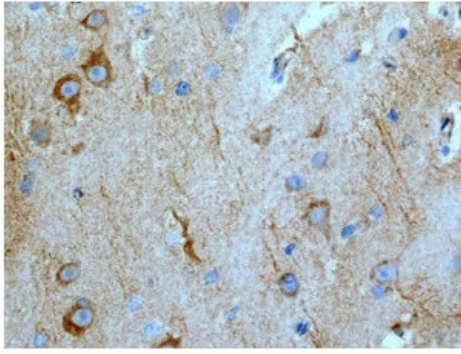
Secondary

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

Predicted band size: 52 kDa

Observed band size: 52 kDa

This data was developed using [ab109226](#), the same antibody clone in a different buffer formulation.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Muscarinic Acetylcholine Receptor 2/CM2 antibody [EPR4568] - BSA and Azide free (ab247798)

This data was developed using [ab109226](#), the same antibody clone in a different buffer formulation. 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

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

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