Product name: Anti-Muscarinic Acetylcholine Receptor 2/CM2 antibody [EPR4568] ab109226

Description: Rabbit monoclonal [EPR4568] to Muscarinic Acetylcholine Receptor 2/CM2

Host species: Rabbit

Specificity: 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.

Tested applications:
- Suitable for: WB, IHC-P
- Unsuitable for: Flow Cyt

Species reactivity: Reacts with: Mouse, Rat, Human

Immunogen: Synthetic peptide within Human Muscarinic Acetylcholine Receptor 2/CM2 aa 150-250. The exact sequence is proprietary.

Database link: P08172


General notes:
- 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.

Form: Liquid
Storage instructions
Frozen Stock (-20°C). Shelf life 12 months.

Storage buffer
pH: 7.20
Preservative: 0.05% Sodium azide
Constituents: 0.1% BSA, 40% Glycerol, 9.85% Tris glycine, 50% Tissue culture supernatant

Purity
Tissue culture supernatant

Clonality
Monoclonal

Clone number
EPR4568

Isotype
IgG

Applications

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.

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<th>Abreviews</th>
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<td>WB</td>
<td>1/1000 - 1/10000. Detects a band of approximately 52 kDa (predicted molecular weight: 52 kDa).</td>
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<tr>
<td>IHC-P</td>
<td>1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.</td>
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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
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

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.

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

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