

Anti-Metabotropic Glutamate Receptor 5 antibody [EPR2425Y] - Low endotoxin, Azide free ab219374

Recombinant RabMAb

[5 References](#) [5 Images](#)

Overview

Product name	Anti-Metabotropic Glutamate Receptor 5 antibody [EPR2425Y] - Low endotoxin, Azide free
Description	Rabbit monoclonal [EPR2425Y] to Metabotropic Glutamate Receptor 5 - Low endotoxin, Azide free
Host species	Rabbit
Specificity	The Human species recommendation is based on the WB results. This antibody has been tested for IHC-P and IHC-Fr in Human samples and we obtain positive signal only in IHC-Fr. We do not recommend this antibody for IHC-P in Human samples.
Tested applications	Suitable for: WB, Electron Microscopy, Flow Cyt (Intra), IHC-P, IHC-Fr Unsuitable for: IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC: mouse brain lysate, rat and mouse cerebrum tissues. Flow Cyt (intra): SH-SY5Y cells
General notes	ab219374 is the carrier-free version of ab76316 .

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.

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.

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.

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.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- 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](#).

Our **Low endotoxin, azide-free formats** have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.20 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR2425Y
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab219374 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
WB		Use at an assay dependent concentration.
Electron Microscopy		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use at an assay dependent concentration. ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. Use of HRP-conjugated or polymerized HRP secondary antibodies, stronger signals have been found using the polymerized HRP secondary.
IHC-Fr		Use at an assay dependent concentration. This antibody has been tested for IHC-P and IHC-Fr in Human samples and we obtain positive signal only in IHC-Fr. We do not recommend this antibody for IHC-P in Human samples.

Application notes

Is unsuitable for IP.

Target

Function

G-protein coupled receptor for glutamate. Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of down-stream effectors. Signaling activates a phosphatidylinositol-calcium second messenger system and generates a calcium-activated chloride current. Plays an important role in the regulation of synaptic plasticity and the modulation of the neural network activity.

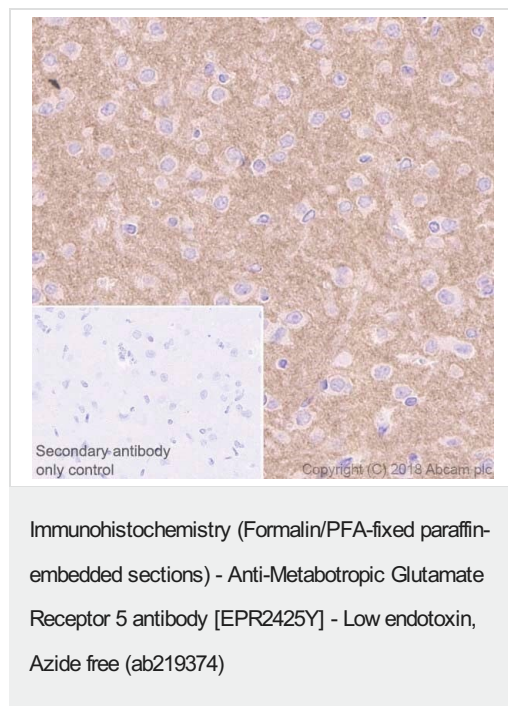
Sequence similarities

Belongs to the G-protein coupled receptor 3 family.

Cellular localization

Cell membrane.

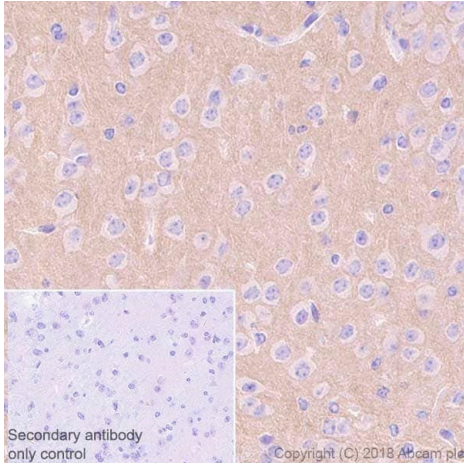
Images



This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab76316](#))

Immunohistochemical analysis of Paraffin-embedded rat cerebrum tissue sections labeling Metabotropic Glutamate Receptor 5 with [ab76316](#) at 1/400 dilution followed by Goat Anti-Rabbit IgG H&L (HRP Polymer) secondary antibody. Sections were counterstained with Hematoxylin. Antigen retrieval was heat mediated using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

Positive staining on rat cerebrum.

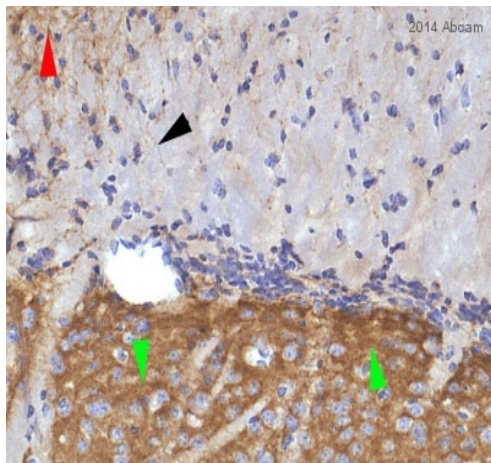


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Metabotropic Glutamate Receptor 5 antibody [EPR2425Y] - Low endotoxin, Azide free (ab219374)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab76316](#))

Immunohistochemical analysis of Paraffin-embedded mouse cerebrum tissue sections labeling Metabotropic Glutamate Receptor 5 with [ab76316](#) at 1/400 dilution followed by Goat Anti-Rabbit IgG H&L (HRP Polymer) secondary antibody. Sections were counterstained with Hematoxylin. Antigen retrieval was heat mediated using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

Positive staining on mouse cerebrum.

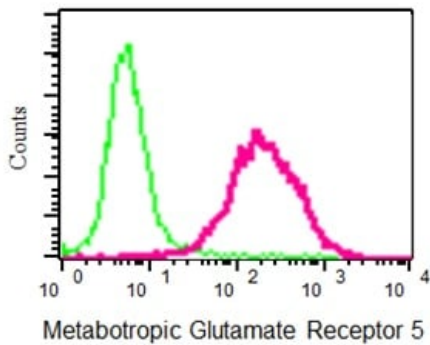


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Metabotropic Glutamate Receptor 5 antibody [EPR2425Y] - Low endotoxin, Azide free (ab219374)

This image is courtesy of an Abreview submitted by Carl Hobbs.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab76316](#))

[ab76316](#) staining Metabotropic Glutamate Receptor 5 in mouse caudate putamen/ Corpus callosum by immunohistochemistry. Tissue was fixed with formaldehyde and citrate-mediated antigen retrieval was performed. Samples were blocked with 1% BSA for 10 minutes at 21°C, before incubation with the primary antibody (1/1000) for 2 hours at 21°C. A biotin conjugated goat anti-rabbit IgG secondary was used at 1/250.

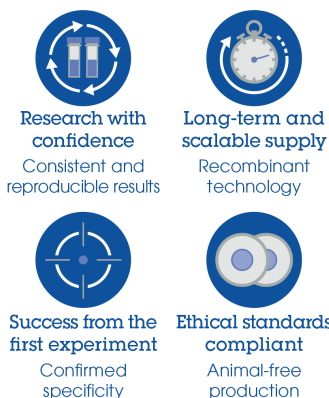


Flow Cytometry (Intracellular) - Anti-Metabotropic Glutamate Receptor 5 antibody [EPR2425Y] - Low endotoxin, Azide free (ab219374)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76316**).

Intracellular flow cytometric analysis of permeabilized SH-SY5Y cells using **ab76316** (red) at 1/20 or a rabbit IgG (**ab172730**) as a negative control (green). The cells were permeabilized with 2% PFA and a goat anti-rabbit IgG FITC was used as the secondary at 1/150.

Why choose a recombinant antibody?



Anti-Metabotropic Glutamate Receptor 5 antibody [EPR2425Y] - Low endotoxin, Azide free (ab219374)

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

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