abcam

ab150387

Anti-Metabotropic Glutamate Receptor 2 + 3 / MGLUR2 + MGLUR3 antibody [EPR8975]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 50% Tissue culture supernatant, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR8975
Purity	Tissue culture supernatant

Reactivity data

IHC-P

Tested

Species	Mouse
Dilution info	1/1800
Notes	For unpurified use at dilution between 1/100 to 1/250

Species	Rat
Dilution info	1/1800

Notes	For unpurified use at dilution between 1/100 to 1/250

Species	Human
Dilution info	1/1800
Notes	For unpurified use at dilution between 1/100 to 1/250

ICC/IF

Tested

Species	Mouse
Dilution info	-
Notes	-

Expected

Species	Rat, Human
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/10000 - 1/50000
Notes	-

Species	Rat
Dilution info	1/10000 - 1/50000
Notes	-

Species	Human
Dilution info	1/10000 - 1/50000
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/70
Notes	-

Expected

Species	Rat, Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information GRM2

Function Dimeric G protein-coupled receptor which is activated by the excitatory neurotransmitter L-glutamate (PubMed:37286794). Plays critical roles in modulating synaptic transmission and neuronal excitability. Upon activation by glutamate, inhibits presynaptic calcium channels, reducing further glutamate release and dampening excitatory signaling (By similarity). Mechanistically, ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of down-stream effectors, such as adenylate cyclase. May mediate suppression of neurotransmission or may be involved in synaptogenesis or synaptic stabilization. (Microbial infection) Plays an important role in influenza virus internalization. (Microbial infection) Acts as a host entry factor for rabies virus that hijacks the endocytosis of GRM2 to enter cells. (Microbial infection) Acts as a host entry factor for SARS-CoV-2 that hijacks the endocytosis of GRM2 to enter cells.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

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

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

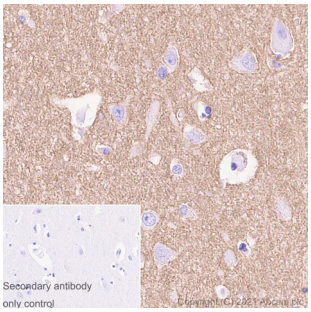
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

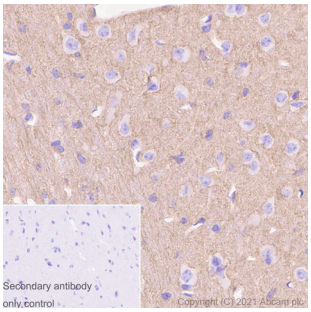
8 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Metabotropic Glutamate Receptor 2 + 3 / MGLUR2 + MGLUR3 antibody [EPR8975] (ab150387)

Metabotropic Glutamate Receptor 2 + 3 / MGLUR2 + MGLUR3 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Metabotropic Glutamate Receptor 2 + 3 / MGLUR2 + MGLUR3 antibody

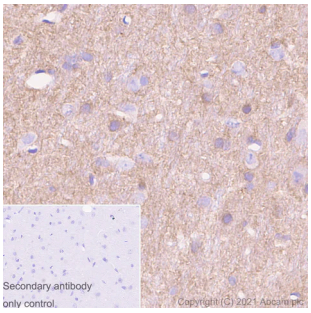
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cerebrum tissue sections labeling Metabotropic Glutamate Receptor 2/MGLUR2 with Purified ab150387 at 1:1800 (0.36 µg/ml). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) . Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) secondary antibody was used. PBS instead of the primary antibody was used as the negative control.



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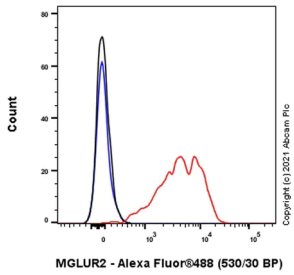
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse cerebrum tissue sections labeling Metabotropic Glutamate Receptor 2/MGLUR2 with Purified ab150387 at 1:1800 (0.36 µg/ml). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) . Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) secondary antibody was used. PBS instead of the primary antibody was used as the negative control.



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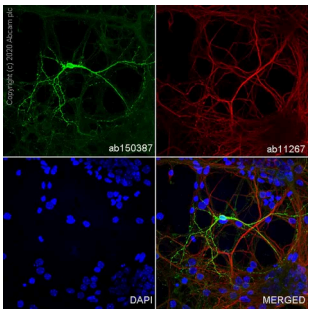
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat cerebrum tissue sections labeling Metabotropic Glutamate Receptor 2/MGLUR2 with Purified ab150387 at 1:1800 (0.36 µg/ml). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) . Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) secondary antibody was used. PBS instead of the primary antibody was used as the negative control.



Flow Cytometry (Intracellular) - Anti-Metabotropic Glutamate Receptor 2 + 3 / MGLUR2 + MGLUR3 antibody [EPR8975] (ab150387)

Metabotropic Glutamate Receptor 2 + 3 / MGLUR2 + MGLUR3 Flow Cytometry (Intracellular) staining using rabbit Anti-Metabotropic Glutamate Receptor 2 + 3 / MGLUR2 + MGLUR3 antibody

Flow Cytometry analysis of Mouse primary neuron cells cells labelling Metabotropic Glutamate Receptor 2/MGLUR2 with Purified ab150387 at 1:70 dilution (10 µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, ab150081) secondary antibody was used at 1:2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabelled control - Cell without incubation with primary antibody and secondary antibody (Blue).

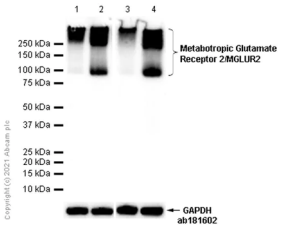


Immunocytochemistry/ Immunofluorescence - Anti-Metabotropic Glutamate Receptor 2 + 3 / MGLUR2 + MGLUR3 antibody [EPR8975] (ab150387)

Metabotropic Glutamate Receptor 2 + 3 / MGLUR2 + MGLUR3 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Metabotropic Glutamate Receptor 2 + 3 / MGLUR2 + MGLUR3 antibody

Immunocytochemistry analysis of mouse primary neurone cells labelling MGLUR2 with ab150387 at 2 µg/mL. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150113) at 1/1000 was used as the secondary antibody (green). Cells were counterstained with Anti-MAP2 rabbit monoclonal antibody (ab11267) at 1/500 dilution and Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) at 1/1000 dilution (red). Nuclear DNA was labelled with DAPI (blue).
Confocal image showing positive staining in mouse primary neuron cells.

Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection.



Western blot - Anti-Metabotropic Glutamate Receptor 2 + 3 / MGLUR2 + MGLUR3 antibody [EPR8975] (ab150387)

All lanes:
Western blot - Anti-Metabotropic Glutamate Receptor 2 + 3 / MGLUR2 + MGLUR3 antibody [EPR8975] (ab150387) at 1/10000 dilution

Lane 1:
Mouse brain lysate boiled at 20 µg

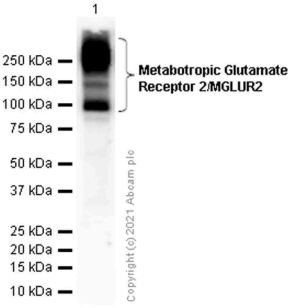
Lane 2:
Mouse brain lysate unboiled at 20 µg

Lane 3:
Rat brain lysate boiled at 20 µg

Lane 4:
Rat brain lysate unboiled at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution



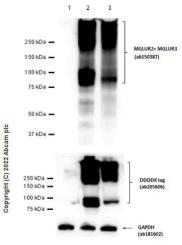
Western blot - Anti-Metabotropic Glutamate Receptor 2 + 3 / MGLUR2 + MGLUR3 antibody [EPR8975] (ab150387)

All lanes:
Western blot - Anti-Metabotropic Glutamate Receptor 2 + 3 / MGLUR2 + MGLUR3 antibody [EPR8975] (ab150387) at 1/10000 dilution

All lanes:
Human brain lysate unboiled

Secondary

All lanes:
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution



Western blot - Anti-Metabotropic Glutamate Receptor 2 + 3 / MGLUR2 + MGLUR3 antibody [EPR8975] (ab150387)

Blocking buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-Metabotropic Glutamate Receptor 2 + 3 / MGLUR2 + MGLUR3 antibody [EPR8975] (ab150387) at 1/10000 dilution

Lane 1:
HEK-293T (Human embryonic kidney epithelial cell) transfected with an empty vector (vector control), containing a myc/flag-tag, not boiled whole cell lysate at 20 µg

Lane 2:
HEK-293T (Human embryonic kidney epithelial cell) transfected with MGLUR2 (aa1-872) with myc/flag-tag, not boiled whole cell lysate at 20 µg

Lane 3:
HEK-293T (Human embryonic kidney epithelial cell) transfected with MGLUR3 (aa1-879) with myc/flag-tag, not boiled whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 95 kDa, 250 kDa

Exposure time: 3s

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.