abcam

ab283589

Anti-Metabotropic Glutamate Receptor 3/MGLUR3 antibody [EPR24635-17] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR24635-17
Purification technique	Affinity purification Protein A

Reactivity data

IP

Tested

Species	Mouse, Rat
Dilution info	-
Notes	-

Expected

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

Flow Cyt

Tested

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

WB

Tested

Species	Mouse, Rat
Dilution info	-
Notes	-

Expected

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

IHC-P

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

IHC-Fr

Tested

Species	Mouse, Rat
Dilution info	-
Notes	-

Expected

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

Target data

See full target information GRM3

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 inhibits adenylate cyclase activity.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

ab283589 is the carrier-free version of ab283572.

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.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. 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.

Compatibility

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.

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

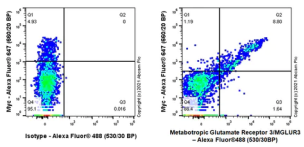
We do not recommend this combination. It is not covered by our product promise.

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.

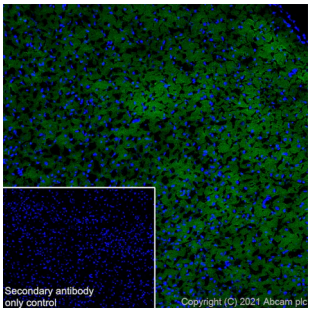
10 product images



Flow Cytometry - Anti-Metabotropic Glutamate Receptor 3/MGLUR3 antibody [EPR24635-17] - BSA and Azide free (ab283589)

Metabotropic Glutamate Receptor 3/MGLUR3 Flow Cytometry staining using rabbit Anti-Metabotropic Glutamate Receptor 3/MGLUR3 antibody

This data was developed using ab283572, the same antibody clone in a different buffer formulation.
Flow cytometric analysis of 2% paraformaldehyde fixed 0.1% Tween-20 permeabilized 293T (Human embryonic kidney epithelial cell) cells transfected with myc tagged human MGLUR3 construct labelling Metabotropic glutamate receptor 3/MGLUR3 with ab283572 at 1/500 dilution (0.1µg / Right), compared with a Rabbit monoclonal IgG (ab172730 / Left) isotype control. A Goat F(ab')2 Anti-Rabbit IgG(DyLight® 488, ab98507) at 1/500 dilution was used as the secondary antibody. Cells were surface stained with rabbit IgG or ab283572. Then fixed with 2% PFA for 10 minutes followed by intracellularly stained with anti-myc tag conjugated to Alexa Fluor® 647.

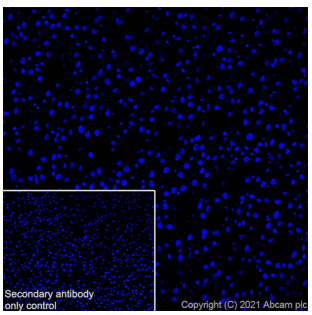


Immunohistochemistry (Frozen sections) - Anti-Metabotropic Glutamate Receptor 3/MGLUR3 antibody [EPR24635-17] - BSA and Azide free (ab283589)

Metabotropic Glutamate Receptor 3/MGLUR3 Immunohistochemistry (Frozen sections) staining using rabbit Anti-Metabotropic Glutamate Receptor 3/MGLUR3 antibody

This data was developed using ab283572, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen rat cerebrum (fresh) tissue labeling Metabotropic glutamate receptor 3/MGLUR3 with ab283572 at 1/100 dilution (5.85 µg/ml) followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (2 µg/ml, Green). Positive staining on rat cerebrum is observed. The nuclear counterstain was DAPI (Blue).

Secondary antibody control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (2 µg/ml)



Immunohistochemistry (Frozen sections) - Anti-Metabotropic Glutamate Receptor 3/MGLUR3 antibody [EPR24635-17] - BSA and Azide free (ab283589)

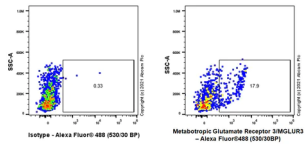
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(5.85 µg/ml) followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (2 µg/ml, Green). The nuclear counterstain was DAPI (Blue). No staining on rat liver.

Negative control: liver (PMID: 9001707) is observed.

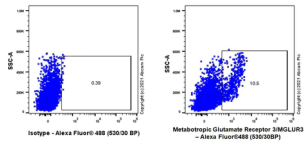
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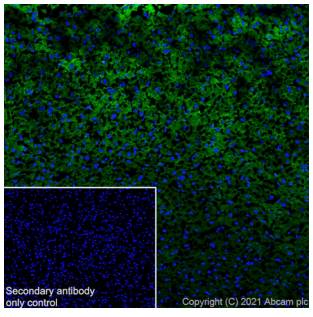
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Flow cytometric analysis of rat primary neuron cells labelling Metabotropic glutamate receptor 3/MGLUR3 with ab283572 at 1/500 dilution (0.1µg / Right) compared with a Rabbit monoclonal IgG (ab172730 / Left) isotype control. Goat F(ab')2 Anti-Rabbit IgG(DyLight® 488, ab98507) at 1/500 dilution was used as the secondary antibody. Gated on viable cells.



Flow Cytometry - Anti-Metabotropic Glutamate Receptor 3/MGLUR3 antibody [EPR24635-17] - BSA and Azide free (ab283589)

Metabotropic Glutamate Receptor 3/MGLUR3 Flow Cytometry staining using rabbit Anti-Metabotropic Glutamate Receptor 3/MGLUR3 antibody

This data was developed using ab283572, the same antibody clone in a different buffer formulation.
Flow cytometric analysis of mouse primary neuron cells labelling Metabotropic glutamate receptor 3/MGLUR3 with ab283572 at 1/500 dilution (0.1µg / Right) compared with a Rabbit monoclonal IgG (ab172730 / Left) isotype control. Goat F(ab')2 Anti-Rabbit IgG(DyLight® 488, ab98507) at 1/500 dilution was used as the secondary antibody. Gated on viable cells.

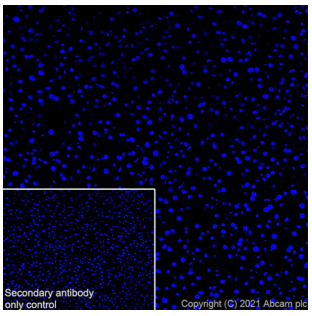


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Metabotropic Glutamate Receptor 3/MGLUR3 Immunohistochemistry (Frozen sections) staining using rabbit Anti-Metabotropic Glutamate Receptor 3/MGLUR3 antibody

This data was developed using ab283572, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen mouse cerebrum (fresh) tissue labeling Metabotropic glutamate receptor 3/MGLUR3 with ab283572 at 1/100 dilution (5.85 µg/ml) followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (2 µg/ml, Green). Positive staining on mouse cerebrum is observed. The nuclear counterstain was DAPI (Blue).

Secondary antibody control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (2 µg/ml)



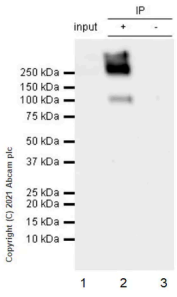
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This data was developed using ab283572, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen mouse liver (fresh) tissue labeling Metabotropic glutamate receptor 3/MGLUR3 with ab283572 at 1/100 dilution (5.85 ug/ml) followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (2 µg/m, Green). The nuclear counterstain was DAPI (Blue). No staining on mouse liver.

Negative control: liver (PMID: 9001707) is observed.

Secondary antibody control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (2 µg/ml)



Immunoprecipitation - Anti-Metabotropic Glutamate Receptor 3/MGLUR3 antibody [EPR24635-17] - BSA and Azide free (ab283589)

This data was developed using ab283572, the same antibody clone in a different buffer formulation.
Metabotropic glutamate receptor 3/MGLUR3 was immunoprecipitated from 0.35 mg rat brain tissue lysate with ab283572 at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab283572 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: Rat brain tissue lysate 10µg

Lane 2: ab283572 IP in Rat brain tissue lysate

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab283572 in rat brain tissue lysate

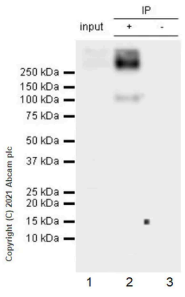
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 32 seconds

All lanes:
Immunoprecipitation - Anti-Metabotropic Glutamate Receptor 3/MGLUR3 antibody [EPR24635-17] (ab283572)

Predicted band size: 99 kDa

Observed band size: 100 kDa, 250 kDa



Immunoprecipitation - Anti-Metabotropic Glutamate Receptor 3/MGLUR3 antibody [EPR24635-17] - BSA and Azide free (ab283589)

This data was developed using ab283572, the same antibody clone in a different buffer formulation.
Metabotropic glutamate receptor 3/MGLUR3 was immunoprecipitated from 0.35 mg mouse brain tissue lysate with ab283572 at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab283572 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: Mouse brain tissue lysate 10µg

Lane 2: ab283572 IP in Mouse brain tissue lysate

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab283572 in mouse brain tissue lysate

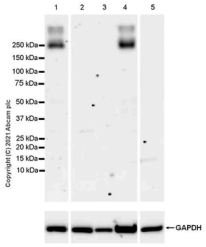
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 32 seconds

All lanes:
Immunoprecipitation - Anti-Metabotropic Glutamate Receptor 3/MGLUR3 antibody [EPR24635-17] (ab283572)

Predicted band size: 99 kDa

Observed band size: 100 kDa, 250 kDa



Western blot - Anti-Metabotropic Glutamate Receptor 3/MGLUR3 antibody [EPR24635-17] - BSA and Azide free (ab283589)

Metabotropic Glutamate Receptor 3/MGLUR3 Western blot staining using rabbit Anti-Metabotropic Glutamate Receptor 3/MGLUR3 antibody

This data was developed using ab283572, the same antibody clone in a different buffer formulation.
Blocking and diluting buffer and concentration: 5% NFDM/TBST

Negative control: kidney, testis (PMID: 8840013).

The molecular weight observed is consistent with what has been described in the literature (PMID: 27130562).

Samples are non-boiled as boiling may cause protein aggregates.

Exposure time: 136 seconds

All lanes:
Western blot - Anti-Metabotropic Glutamate Receptor 3/MGLUR3 antibody [EPR24635-17] (ab283572) at 1/1000 dilution

Lane 1:
Mouse brain tissue lysate at 20 µg

Lane 2:
Mouse kidney tissue lysate at 20 µg

Lane 3:
Mouse testis tissue lysate at 20 µg

Lane 4:
Rat brain tissue lysate at 20 µg

Lane 5:
Rat testis tissue lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 99 kDa

Observed band size: 250 kDa

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