abcam

ab233791

Anti-MGLUR8 antibody [4C1C1]

Mouse Monoclonal MGLUR8 antibody. Suitable for Flow Cyt, WB and reacts with Human samples. Cited in 2 publications. Immunogen corresponding to Recombinant Fragment Protein within Human GRM8 aa 400 to C-terminus.

Image updates are in progress. Products remain available and covered by the Abcam Product Promise. Learn more.

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human GRM8 aa 400 to C-terminus. The exact immunogen used to generate this antibody is proprietary information. Database link O00222
Clone number	4C1C1
Purification technique	Affinity purification Protein G
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from tissue culture supernatant.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/200 - 1/400
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/500 - 1/2000
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

Target data

See full target information GRM8

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, such as adenylate cyclase. Signaling inhibits adenylate cyclase activity.

Storage

Shipped at conditions	Blue Ice

Appropriate short-term storage duration	1-2 weeks
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

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	The metabotropic glutamate receptor 8 (mGluR8) also known as GRM8 is a G-protein coupled receptor with an approximate molecular mass of 105 kDa. This receptor is involved in neurotransmitter signaling and plays a significant role in synaptic transmission by regulating the release of neurotransmitters. mGluR8 is mostly expressed in the brain specifically in regions related to sensory perception and modulation such as the retina olfactory bulb and various other brain areas.
Biological function summary	MGluR8 impacts neuronal excitability by modulating synaptic plasticity. It is often found as part of a dimerized complex with other mGluR proteins affecting intracellular signaling cascades. The receptor functions largely through inhibition of the cyclic AMP pathway making it a critical regulator in glutamatergic signaling. mGluR8’s activity serves as an important control point for maintaining the balance of excitatory neurotransmission within the central nervous system.
Pathways	MGluR8 is intricately connected to glutamatergic synaptic transmission and the cAMP signaling pathway. Through its role in these pathways mGluR8 interacts with proteins such as adenylate cyclase and other mGluR family members modulating downstream signaling events. These interactions position mGluR8 as an important element in neural communication processes influencing learning and memory functions.
Associated diseases and disorders	MGluR8 has been associated with neurodegenerative diseases like Alzheimer's and psychiatric disorders such as anxiety. Its regulatory role in glutamatergic neurotransmission links it to pathologies characterized by excitotoxicity and altered synaptic plasticity. Interactions between mGluR8 and other proteins like presenilin-1 in Alzheimer's disease shed light on its potential as a therapeutic target for modulating disease progression.

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

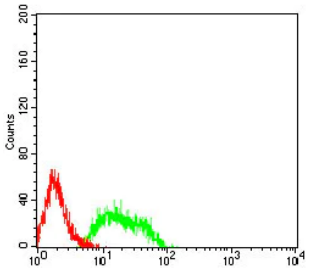
We do not recommend this combination. It is not covered by our product promise.

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.

1 product image



Flow Cytometry - Anti-MGLUR8 antibody [4C1C1] (ab233791)

MGLUR8 Flow Cytometry staining using mouse Anti-MGLUR8 antibody

Flow cytometric analysis of SK-N-SH (human neuroblastoma cell line) cells labeling MGLUR8 with ab233791 at 1/200 dilution (green) compared with a negative control (red).

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