

GRM2 Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF3274a

Specification

GRM2 Antibody (internal region) - Product Information

Application WB, IHC, E
Primary Accession Q14416

Other Accession NP 000830.2, NP 001123535.1, 2912, 108068

(mouse), 24415 (rat)

Reactivity Human

Predicted Mouse, Rat, Rabbit, Dog

Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml
Isotype IgG
Calculated MW 95568

GRM2 Antibody (internal region) - Additional Information

Gene ID 2912

Other Names

Metabotropic glutamate receptor 2, mGluR2, GRM2, GPRC1B, MGLUR2

Dilution

WB~~1:1000 IHC~~1:100~500

E~~N/A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

GRM2 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

GRM2 Antibody (internal region) - Protein Information

Name GRM2 (HGNC:4594)

Synonyms GPRC1B, MGLUR2



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.

Cellular Location

Cell membrane; Multi-pass membrane protein. Synapse. Cell projection, dendrite

Tissue Location

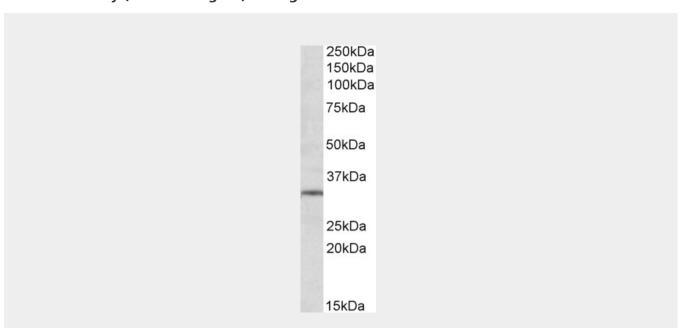
Detected in brain cortex (at protein level). Widely expressed in different regions of the adult brain as well as in fetal brain.

GRM2 Antibody (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

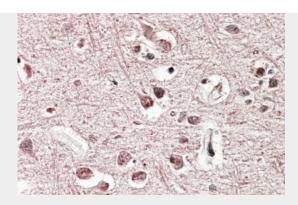
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GRM2 Antibody (internal region) - Images



AF3274a (1 μ g/ml) staining of Human Hippocampus lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.





AF3274a (3.8 μ g/ml) staining of paraffin embedded Human Cerebral Cortex. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

GRM2 Antibody (internal region) - Background

This antibody is expected to recognize both isoforms (NP 000830.2; NP 001123535.1).

GRM2 Antibody (internal region) - References

Identification of neuroglycan C and interacting partners as potential susceptibility genes for schizophrenia in a Southern Chinese population. So HC, Fong PY, Chen RY, Hui TC, Ng MY, Cherny SS, Mak WW, Cheung EF, Chan RC, Chen EY, Li T, Sham PC, American journal of medical genetics. Part B, Neuropsychiatric genetics: the official publication of the International Society of Psychiatric Genetics 2010 Jan 153B (1): 103-13. PMID: 19367581