

GRM2
Purified Mouse Monoclonal Antibody
Catalog # AO2669a**Specification**

GRM2 - Product Information

Application	WB, IHC, ICC, E
Primary Accession	Q14416
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Calculated MW	95.6kDa KDa
Immunogen	

Purified recombinant fragment of human GRM2 (AA: extra 414-558) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

GRM2 - Additional Information

Gene ID 2912

Other Names

GLUR2; mGlu2; GPRC1B; MGLUR2

Dilution

WB~~ 1/500 - 1/2000

IHC~~1:100~500

ICC~~N/A

E~~ 1/10000

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 is for research use only and not for use in diagnostic or therapeutic procedures.

GRM2 - 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 - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

GRM2 - Images

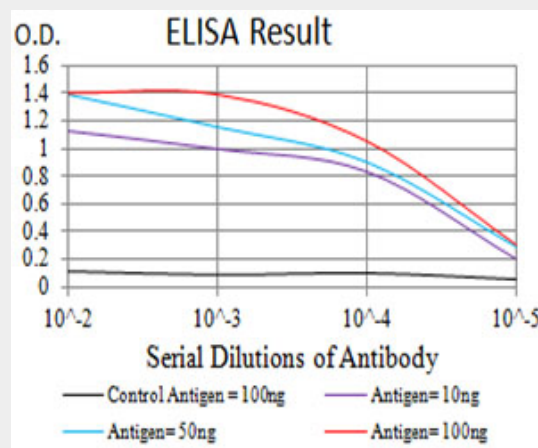


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

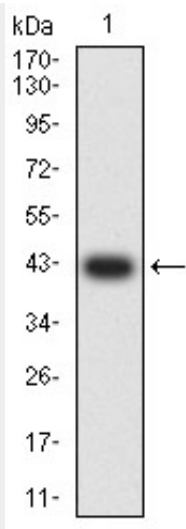


Figure 2: Western blot analysis using GRM2 mAb against human GRM2 (AA: extra 414-558) recombinant protein. (Expected MW is 42.4 kDa)

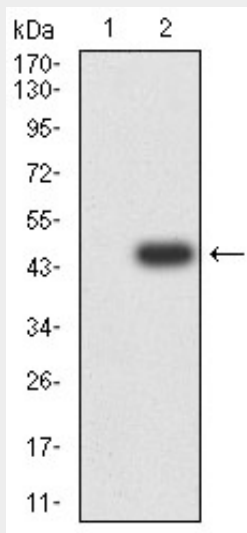


Figure 4: Western blot analysis using GRM2 mAb against HEK293 (1) and GRM2 (AA: extra 414-558)-hlgGfC transfected HEK293 (2) cell lysate.

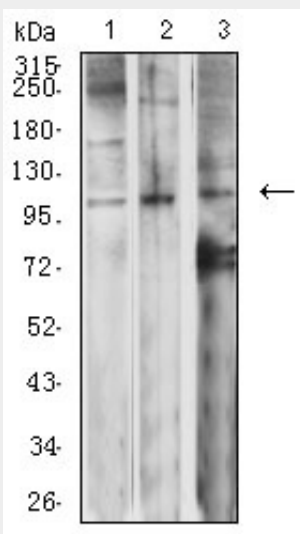


Figure 4:Western blot analysis using GRM2 mouse mAb against SK-N-SH (1), Jurkat (2), and SW620 (3) cell lysate.

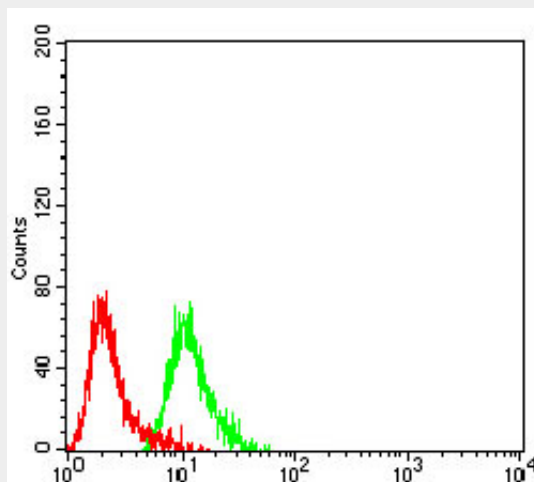


Figure 5:Flow cytometric analysis of SK-N-SH cells using GRM2 mouse mAb (green) and negative control (red).

GRM2 - References

1.Br J Pharmacol. 2015 May;172(9):2383-96.2.Brain Res. 2009 Jan 16;1249:244-50.