

GRM7
Purified Mouse Monoclonal Antibody
Catalog # AO2570a**Specification**

GRM7 - Product Information

Application	E, WB, FCM, ICC
Primary Accession	Q14831
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Calculated MW	102.3kDa KDa
Immunogen	

Purified recombinant fragment of human GRM7 (AA: 454-590) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

GRM7 - Additional Information

Gene ID 2917

Other Names

GLUR7; MGLU7; GPRC1G; MGLUR7; PPP1R87

Dilution

E~~ 1/10000
WB~~ 1/300 - 1/800
FCM~~1/200 - 1/400
ICC~~ 1/200 - 1/1000

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

GRM7 is for research use only and not for use in diagnostic or therapeutic procedures.

GRM7 - Protein Information

Name GRM7

Synonyms GPRC1G, MGLUR7

Function

G-protein coupled receptor activated by glutamate that regulates axon outgrowth through the

MAPK-cAMP-PKA signaling pathway during neuronal development (PubMed:33500274). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide- binding proteins (G proteins) and modulates the activity of downstream effectors, such as adenylate cyclase that it inhibits (PubMed:9473604).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

Expressed in many areas of the brain, especially in the cerebral cortex, hippocampus, and cerebellum. Expression of GRM7 isoforms in non-neuronal tissues appears to be restricted to isoform 3 and isoform 4.

GRM7 - 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](#)

GRM7 - Images

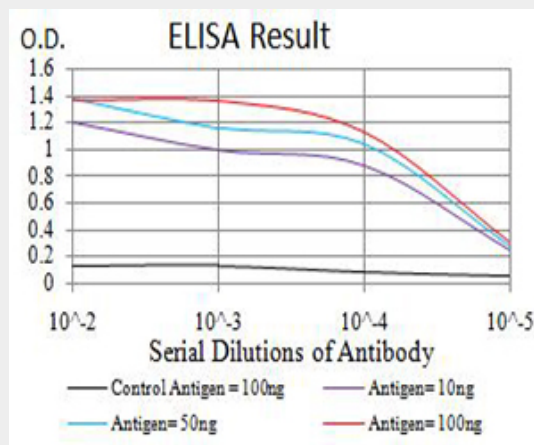


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

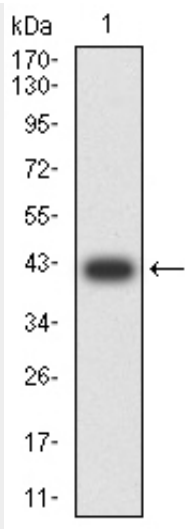


Figure 2: Western blot analysis using GRM7 mAb against human GRM7 (AA: 454-590) recombinant protein. (Expected MW is 41.7 kDa)

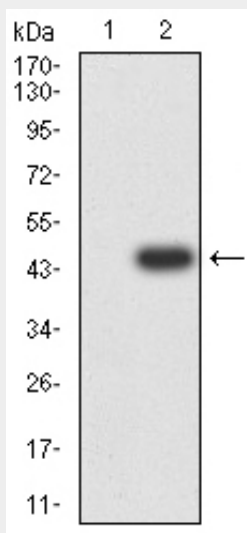


Figure 3: Western blot analysis using GRM7 mAb against HEK293 (1) and GRM7 (AA: 454-590)-hlgGfC transfected HEK293 (2) cell lysate.

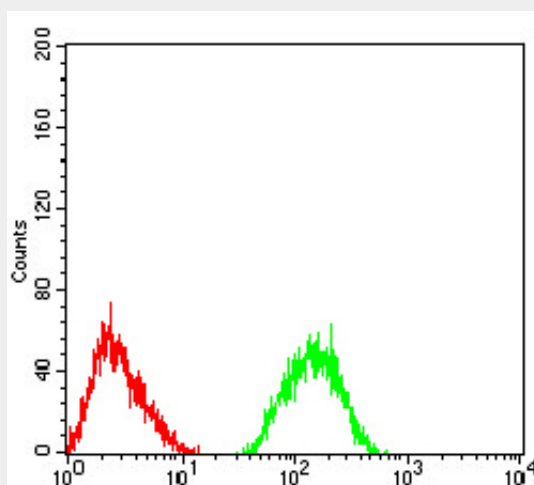


Figure 6: Flow cytometric analysis of SH-SY5Y cells using GRM7 mouse mAb (green) and negative

control (red).

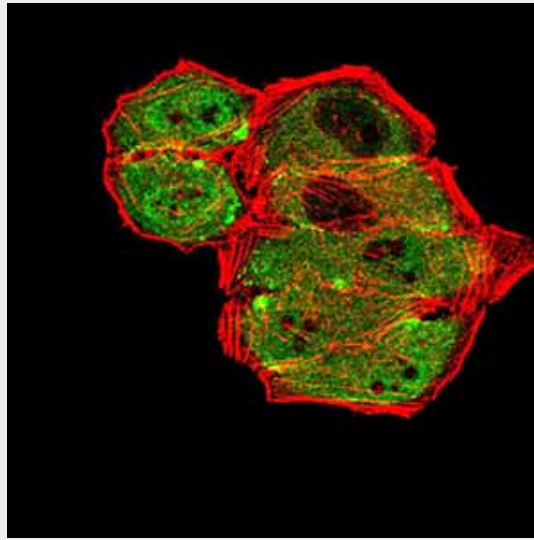


Figure 4:Immunofluorescence analysis of HeLa cells using GRM7 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

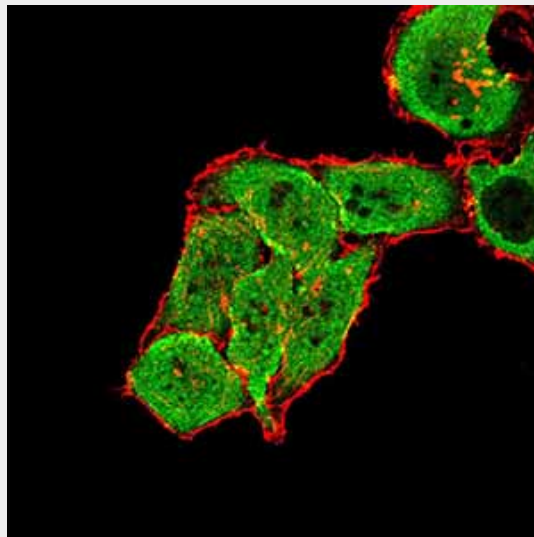


Figure 5:Immunofluorescence analysis of SMMC-7721 cells using GRM7 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

GRM7 - References

1.Psychiatr Genet. 2014 Dec;24(6):281-2.2.Life Sci. 2013 Feb 7;92(2):149-53.