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GRM7

Purified Mouse Monoclonal Antibody
Catalog # AO2570a

Product Information

Application	WB, IHC, ICC, E
Primary Accession	Q14831
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	7G8D3
Isotype	Mouse IgG1
Calculated MW	102251
Immunogen	Purified recombinant fragment of human GRM7 (AA: 454-590) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	2917
Other Names	GLUR7; MGLU7; GPRC1G; MGLUR7; PPP1R87
Dilution	WB~~ 1/300 - 1/800 IHC~~1:100~500 ICC~~ 1/200 - 1/1000 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	GRM7 is for research use only and not for use in diagnostic or therapeutic procedures.

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.

References

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

Images

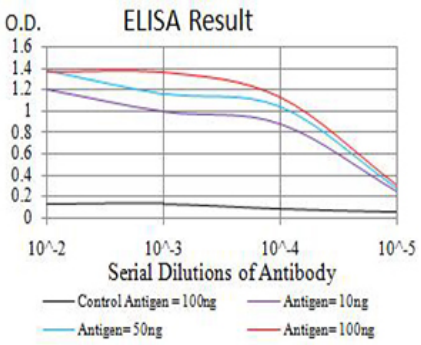


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

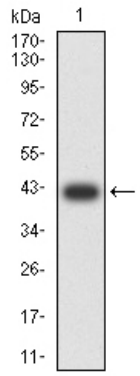


Figure 2:Western blot analysis using GRM7 mAb against human GRM7 (AA: 454-590) recombinant protein. (Expected MW is 41.7 kDa)

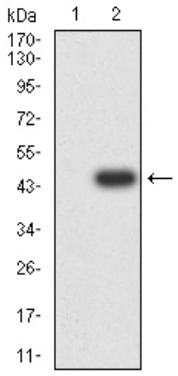
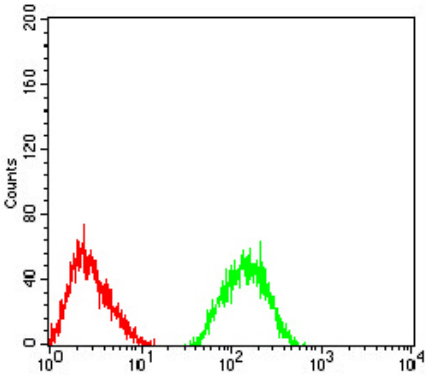


Figure 3:Western blot analysis using GRM7 mAb against HEK293 (1) and GRM7 (AA: 454-590)-hIgGFc transfected HEK293 (2) cell lysate.

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



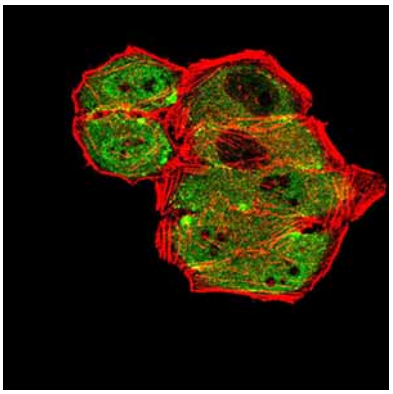


Figure 4:Immunofluorescence analysis of Hela cells using GRM7 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

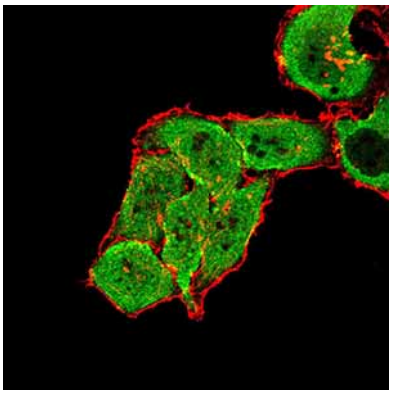


Figure 5:Immunofluorescence analysis of SMMC-7721 cells using GRM7 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

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