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# Anti-mGLUR7 Antibody

Catalog # AP51248

## Product Information

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|---|---|
| **Application** | WB, IHC, IP, IF/IC |
| **Primary Accession** | Q14831 |
| **Reactivity** | Human, Mouse, Rat, Rabbit, Dog |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 102251 |

## Additional Information

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| **Gene ID** | 2917 |
| **Other Names** | GPRC1G; MGLUR7; Metabotropic glutamate receptor 7; mGluR7 |
| **Target/Specificity** | KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human mGLUR7. The exact sequence is proprietary. |
| **Dilution** | WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IP~~N/A IF/IC~~N/A |
| **Format** | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |
| **Storage** | Store at -20 °C.Stable for 12 months from date of receipt |

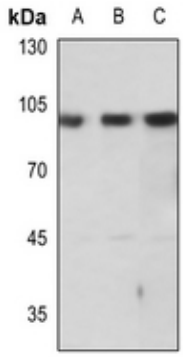
## Protein Information

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|---|---|
| **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. |

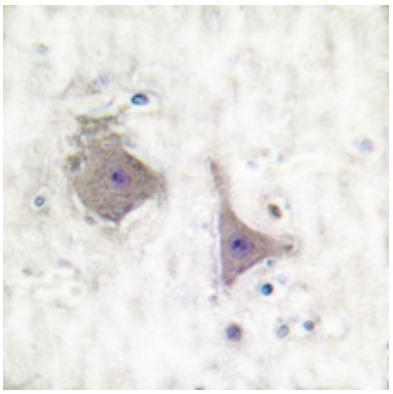
## References

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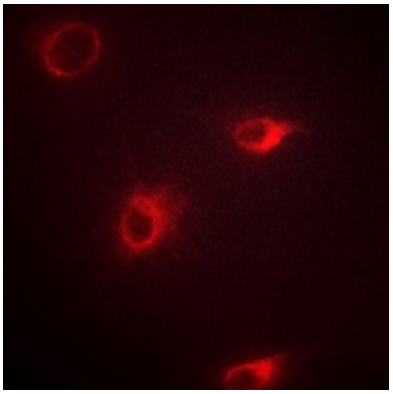
## Images




Western blot analysis of mGLUR7 expression in U2OS (A), mouse testis (B), rat testis (C) whole cell lysates.
(Predicted band size: 102 kD; Observed band size: 102 kD)



Immunohistochemical analysis of mGLUR7 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of mGLUR7 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

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