

mGluR1 Antibody

Rabbit mAb Catalog # AP91016

Product Information

Application WB Primary Accession Q13255

Reactivity Rat, Human, Mouse

Clonality Monoclonal

Other Names GRM1A; mGlu1; GPRC1A; MGLUR1; SCAR13; MGLUR1A;

IsotypeRabbit IgGHostRabbitCalculated MW132357

Additional Information

Dilution WB 1:500~1:2000

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human mGluR1

Description L-glutamate is the major excitatory neurotransmitter in the central nervous

system and activates both ionotropic and metabotropic glutamate receptors. Glutamatergic neurotransmission is involved in most aspects of normal brain function and can be perturbed in many neuropathologic conditions. The metabotropic glutamate receptors are a family of G protein-coupled receptors, that have been divided into 3 groups on the basis of sequence homology, putative signal transduction mechanisms, and pharmacologic

properties.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

Protein Information

Name GRM1

Synonyms GPRC1A, MGLUR1

Function G-protein coupled receptor for glutamate. Ligand binding causes a

conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of down-stream effectors. Signaling activates a phosphatidylinositol- calcium second messenger system.

May participate in the central action of glutamate in the CNS, such as

long-term potentiation in the hippocampus and long-term depression in the cerebellum (PubMed:24603153, PubMed:28886343, PubMed:7476890). May function in the light response in the retina (By similarity). Induces GRID1 and GRID2 cation-channel activation via GNAQ-PLC-PKC pathway in dopaminergic

neurons and cerebellar Purkinje cell, respectively (PubMed: <u>24357660</u>, PubMed: <u>27276689</u>).

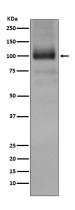
Cellular Location

Cell membrane; Multi-pass membrane protein. Postsynaptic cell membrane; Multi-pass membrane protein. Cell projection, dendrite {ECO:0000250|UniProtKB:P97772}. Note=Located in dendrioles, small dendrites that makes up a brush structure found as the terminal specialization of a dendrite of a unipolar brush cell {ECO:0000250|UniProtKB:P97772}

Tissue Location

Detected in brain..

Images



Western blot analysis of mGluR1 expression in Mouse brain lysate.

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