

### mGluR1 Antibody

Rabbit mAb Catalog # AP91016

# **Specification**

### mGluR1 Antibody - Product Information

Application WB
Primary Accession Q13255
Reactivity Rat

Clonality Monoclonal

**Other Names** 

GRM1A; mGlu1; GPRC1A; MGLUR1; SCAR13; MGLUR1A;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 132357 Da

# mGluR1 Antibody - Additional Information

Dilution WB~~1:1000

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.

## mGluR1 Antibody - 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:<a href="http://www.uniprot.org/citations/24603153" target="\_blank">24603153</a>, PubMed:<a href="http://www.uniprot.org/citations/28886343" target="\_blank">28886343</a>, PubMed:<a href="http://www.uniprot.org/citations/7476890" target="\_blank">7476890</a>). 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:<a href="http://www.uniprot.org/citations/24357660" target="\_blank">24357660</a>, PubMed:<a href="http://www.uniprot.org/citations/27276689" target="\_blank">27276689</a>, PubMed:<a href="http://www.uniprot.org/citations/27276689" target="\_blank">27276689</a>/a>).

#### **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**

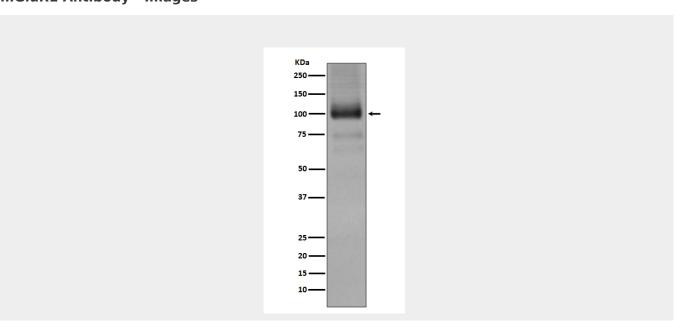
Detected in brain..

### mGluR1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## mGluR1 Antibody - Images







Western blot analysis of mGluR1 expression in Mouse brain lysate.