

**GRM1 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP13701b****Specification**

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**GRM1 Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q13255</a>
Other Accession	<a href="#">NP_001107801.1</a> , <a href="#">NP_000829.2</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	132357
Antigen Region	1095-1123

**GRM1 Antibody (C-term) - Additional Information****Gene ID** 2911**Other Names**

Metabotropic glutamate receptor 1, mGluR1, GRM1, GPRC1A, MGLUR1

**Target/Specificity**

This GRM1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1095-1123 amino acids from the C-terminal region of human GRM1.

**Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

GRM1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**GRM1 Antibody (C-term) - 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:[24357660](#), PubMed:[27276689](#)).

#### 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

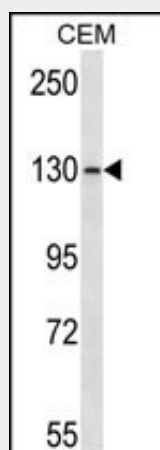
Detected in brain..

### GRM1 Antibody (C-term) - 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](#)

### GRM1 Antibody (C-term) - Images



GRM1 Antibody (C-term) (Cat. #AP13701b) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the GRM1 antibody detected the GRM1 protein (arrow).

### GRM1 Antibody (C-term) - Background

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. Group I includes GRM1 and GRM5 and these receptors have been shown to activate phospholipase C. Group II includes GRM2 and GRM3 while Group III includes GRM4, GRM6, GRM7 and GRM8. Group II and III receptors are linked to the inhibition of the cyclic AMP cascade but differ in their agonist selectivities. The canonical alpha isoform of the metabotropic glutamate receptor 1 gene is a disulfide-linked homodimer whose activity is mediated by a G-protein-coupled phosphatidylinositol-calcium second messenger system. Alternative splicing results in multiple transcript variants encoding distinct isoforms; some of which may have distinct functions. [provided by RefSeq].

#### **GRM1 Antibody (C-term) - References**

Jiang, Y., et al. J. Biol. Chem. 285(43):33463-33474(2010)  
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)  
Gong, P., et al. J. Mol. Neurosci. 42(1):120-126(2010)  
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :  
Boer, K., et al. Brain Res. 1324, 24-33 (2010) :