

Rabbit Anti-GRM1 antibody

SL12011R

Product Name GRM1

Chinese Name 代谢型谷氨酸受体 1A 抗体

Alias GRM1_HUMAN; Metabotropic glutamate receptor 1; GPRC1A; MGLUR1; mGluR1;

Research Area Cell biology Neurobiology The cell membrane 受体 G protein-coupled receptor The new supersedes the old G protein signal

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human,Mouse(predicted:Rat,Chicken,Dog,Pig,Cow,Horse,Zebrafish,Sheep)

Applications IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=2ug/Test (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 130kDa

Detection molecular weight 140-150 kDa

Cellular localization The cell membrane

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human MGLUR1: 151-250/1194 <Extracellular>

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic

or diagnostic applications.

PubMed

[PubMed](#)

This gene encodes a metabotropic glutamate receptor that functions by activating phospholipase C. 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 canonical alpha isoform of the encoded protein is a disulfide-linked homodimer whose activity is mediated by a G-protein-coupled phosphatidylinositol-calcium second messenger system. This gene may be associated with many disease states, including schizophrenia, bipolar disorder, depression, and breast cancer. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, May 2013]

Function:

Receptor for glutamate. The activity of this receptor is mediated by a G-protein that 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.

Subunit:

Homodimer; disulfide-linked. The PPXXF motif binds HOMER1, HOMER2 and HOMER3. Interacts with SIAH1, RYR1, RYR2, ITPR1, SHANK1, SHANK3 and GRASP

**Product
Detail**

Subcellular Location:

Cell Membrane; multi pass membrane protein.

Similarity:

Belongs to the G-protein coupled receptor 3 family.

SWISS:

Q13255

Gene ID:

2911

Database links:

[Entrez Gene: 2911](#) Human

[Entrez Gene: 14816](#) Mouse

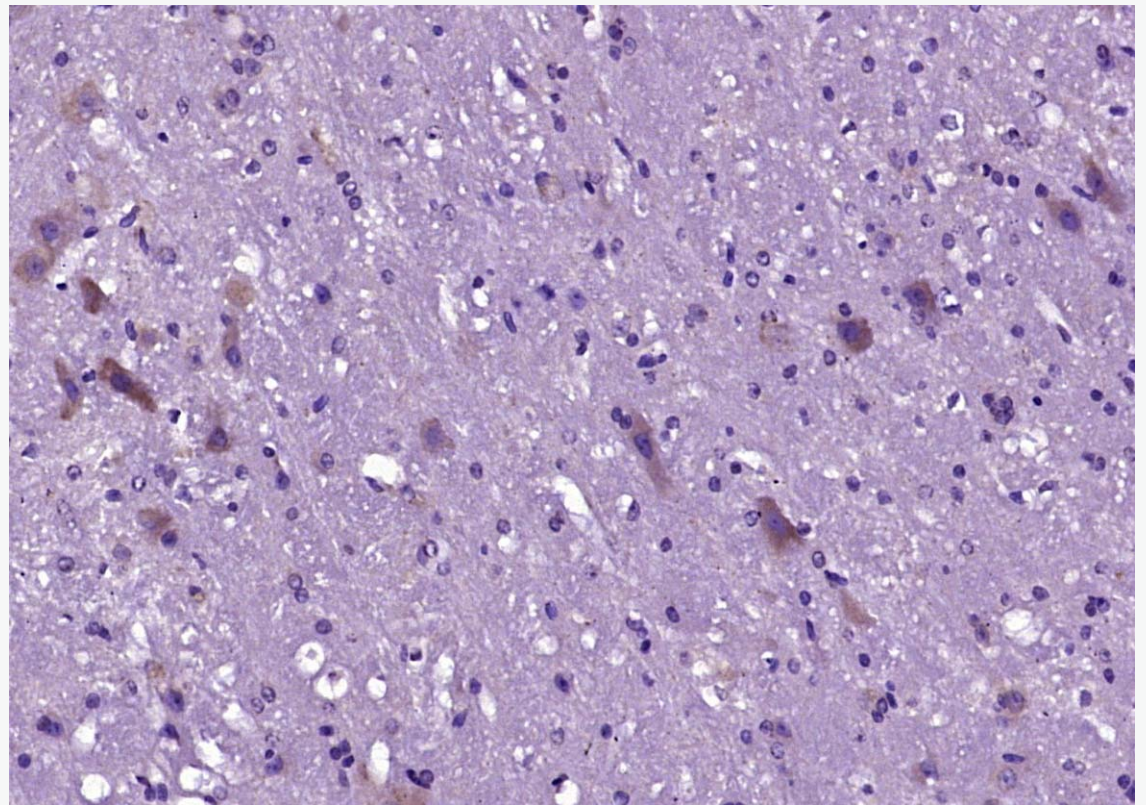
[Entrez Gene: 24414](#) Rat

[SwissProt: Q13255](#) Human

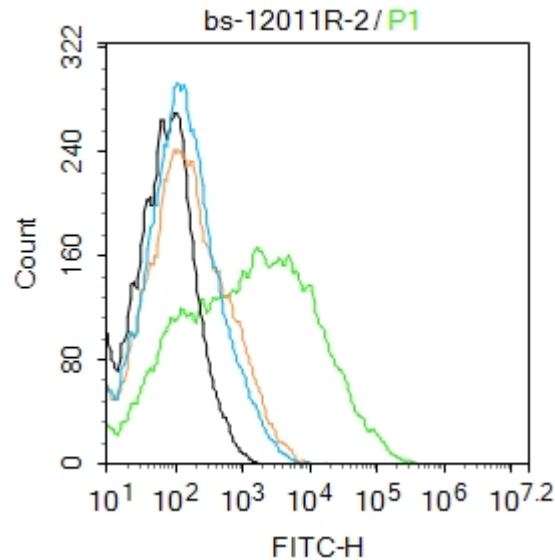
[SwissProt: P97772](#) Mouse

[SwissProt: P23385](#) Rat

**Product
Picture**



Paraformaldehyde-fixed, paraffin embedded (mouse cerebellum tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GRM1) Polyclonal Antibody, Unconjugated (SL12011R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control:Mouse brain.

Primary Antibody (green line): Rabbit Anti-GRM1 antibody (SL12011R)

Dilution: $2\mu\text{g} / 10^6$ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-FITC

Dilution: $1\mu\text{g} / \text{test}$.

Protocol

The cells were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature.

Acquisition of 20,000 events was performed.