

## Rabbit Anti-MGLUR5 antibody

SL18801R

Product Name:	MGLUR5
Chinese Name:	代谢型谷氨酸受体5B抗体
Alias:	MGLUR5B; Glutamate receptor metabotropic 5; GPRC1E; GRM 5; GRM5; Metabotropic glutamate receptor 5; mGlu5; mGluR5; mGluR5a; mGluR5b; Metabotropic glutamate receptor 5 variant F; Metabotropic Glutamate Receptor 5b; Metabotropic glutamate receptor 5 variant G; Metabotropic glutamate receptor 5 variant H; PPP1R86; GRM5 HUMAN;
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Cow, Horse, Sheep, Monkey,
Applications:	WB=1:500-2000ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	130kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
<b>Concentration:</b>	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MGLUR5:431- 530/1212 <extracellular></extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Glutamate receptors constitute the principal excitatory neurotransmitter receptors in brain. Two classes of glutamate receptors exist: Ionotropic receptors, and metabotropic receptors (mGluRs). Metabotropic Glutamate Receptor 5b (GRM5) activity is mediated

by a G-protein that activates a phosphatidylinositol-calcium second messenger system and generates a calcium-activated chloride current. The metabotropic glutamate receptor type 5 (mGlu5) is expressed in two splice variants, mGlu5a and mGlu5b, which differ in that mGlu5b has a 33-amino acid insert in the intracellular C-terminal domain. This receptor subtype is highly regulated, with higher levels found in developing animals.

## **Function:**

G-protein coupled receptor for glutamate. Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteKns) and modulates the activity of down-stream effectors. Signaling activates a phosphatidylinositol-calcium second messenger system and generates a calciumactivated chloride current. Plays an important role in the regulation of synaptic plasticity and the modulation of the neural network activity.

## Subunit:

The PPXXF motif binds HOMER1, HOMER2 and HOMER3. Interacts with SIAH1, RYR1, RYR2, ITPR1, SHANK1, SHANK3 and GRASP. Interacts with NCDN (By similarity).

Subcellular Location: Cell Membrane

Similarity: Belongs to the G-protein coupled receptor 3 family.

**SWISS:** P41594

Gene ID: 2915

Database links:

Entrez Gene: 2915 Human

Entrez Gene: 108071 Mouse

Entrez Gene: 24418 Rat

<u>Omim: 604102</u> Human

<u>SwissProt: P41594</u> Human

SwissProt: Q3UVX5 Mouse

SwissProt: P31424 Rat



