



# Glutamate Receptor 1 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-16318
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse
<b>Applications</b>	WB;IHC;IF
<b>Gene Name</b>	GRIA1
<b>Protein Name</b>	Glutamate receptor 1 (GluR-1) (AMPA-selective glutamate receptor 1) (GluR-A) (GluR-K1) (Glutamate receptor ionotropic, AMPA 1) (GluA1)
<b>Immunogen</b>	Synthetic Peptide of Glutamate Receptor 1 AA range: 773-823
<b>Specificity</b>	The antibody detects endogenous Glutamate Receptor 1 protein
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	Glutamate receptor 1 (GluR-1;AMPA-selective glutamate receptor 1;GluR-A;GluR-K1;Glutamate receptor ionotropic, AMPA 1;GluA1)
<b>Observed Band</b>	100kD
<b>Cell Pathway</b>	Cell membrane ; Multi-pass membrane protein . Endoplasmic reticulum membrane ; Multi-pass membrane protein . Cell junction, synapse, postsynaptic cell membrane ; Multi-pass membrane protein . Cell junction, synapse, postsynaptic density membrane ; Multi-pass membrane protein . Cell projection, dendrite . Cell projection, dendritic spine . Early endosome membrane ; Multi-pass membrane protein . Recycling endosome membrane ; Multi-pass membrane protein . Cell junction, synapse, presynapse . Cell junction, synapse . Interaction with CACNG2, CNIH2 and CNIH3 promotes cell surface expression. Colocalizes with PDLIM4 in early endosomes. Displays a somatodendritic localization and is excluded from axons in neurons (By similarity). Localized to cone photoreceptor pedicles (By similarity). .
<b>Tissue Specificity</b>	Widely expressed in brain.
<b>Function</b>	function:Ionotropic glutamate receptor. L-glutamate acts as an excitatory neurotransmitter at many synapses in the central nervous system. Binding of the excitatory neurotransmitter L-glutamate induces a conformation change, leading to the opening of the cation channel, and thereby converts the chemical signal to an electrical impulse. The receptor then desensitizes rapidly and enters a transient inactive state, characterized by the presence of bound



agonist.,miscellaneous:The postsynaptic actions of Glu are mediated by a variety of receptors that are named according to their selective agonists. This receptor binds AMPA (quisqualate) > glutamate > kainate.,PTM:Palmitoylated. Depalmitoylated upon glutamate stimulation. Cys-603 palmitoylation leads to Golgi retention and decreased cell surface expression. In contrast, Cys-829 palmitoylation does not affect cell surface expression but regul

### Background

Glutamate receptors are the predominant excitatory neurotransmitter receptors in the mammalian brain and are activated in a variety of normal neurophysiologic processes. These receptors are heteromeric protein complexes with multiple subunits, each possessing transmembrane regions, and all arranged to form a ligand-gated ion channel. The classification of glutamate receptors is based on their activation by different pharmacologic agonists. This gene belongs to a family of alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate (AMPA) receptors. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],

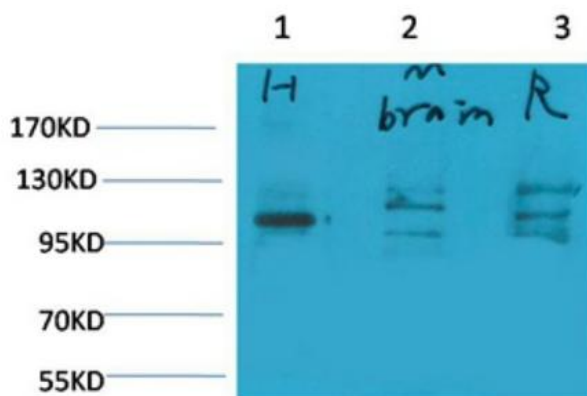
### matters needing attention

Avoid repeated freezing and thawing!

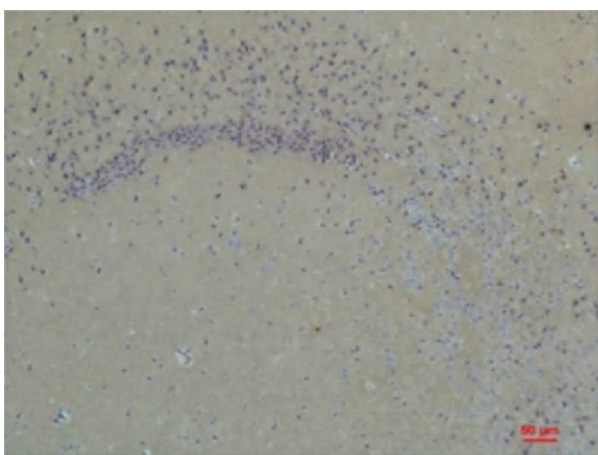
### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western blot analysis of 1) Human Brain Tissue, 2)Mouse Brain Tissue, 3) Rat Brain Tissue with Glutamate Receptor 1 Rabbit pAb diluted at 1:2,000.



Immunohistochemical analysis of paraffin-embedded Rat Brain Tissue using Glutamate Receptor 1Rabbit pAb diluted at 1:200.