



Rabbit Anti-GluR1 antibody

SL10042R

Product Name:	GluR1
Chinese Name:	谷氨酸受体1抗体
Alias:	Glutamate receptor 1; GLUR 1; GLUR A; AMPA 1; GluR-1; AMPA selective glutamate receptor 1; AMPA-selective glutamate receptor 1; GluA1; GLUH 1; GLUH1; GluR K1; GluR-1; GluR-A; GluR-K1; GLUR1; GLURA; GluRK1; Glutamate receptor ionotropic AMPA 1; Glutamate receptor ionotropic; Glutamate receptor, ionotropic, AMPA 1; Gria 1; Gria1; GRIA1_HUMAN; HBGR1; MGC133252; OTTHUMP00000160643; OTTHUMP00000165781; OTTHUMP00000224241; OTTHUMP00000224242; OTTHUMP00000224243.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Cow,Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	98kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GluR1:141-240/906<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

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].

Function:

Iontropic 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.

Subunit:

Homotetramer or heterotetramer of pore-forming glutamate receptor subunits. Tetramers may be formed by the dimerization of dimers. Interacts with DLG1 via its C-terminus. Interacts with SYNDIG1 and GRIA2. Interacts with LRFN. Interacts with HIP1 and RASGRF2. Found in a complex with GRIA2, GRIA3, GRIA4, CNIH2, CNIH3, CACNG2, CACNG3, CACNG4, CACNG5, CACNG7 and CACNG8. Interacts with CACNG5. Interacts with CNIH2 and CACNG2.

Subcellular Location:

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 cell membrane, postsynaptic density. Cell projection, dendrit. Cell projection, dendritic spine. Note=Interaction with CACNG2, CNIH2 and CNIH3 promotes cell surface expression.

Tissue Specificity:

Widely expressed in brain.

Post-translational modifications:

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 regulates stimulation-dependent endocytosis.

Similarity:

Belongs to the glutamate-gated ion channel (TC 1.A.10.1) family. GRIA1 subfamily.

SWISS:

Product Detail:

P42261

Gene ID:
2890

Database links:

[Entrez Gene: 2890](#) Human

[Entrez Gene: 14799](#) Mouse

[Entrez Gene: 50592](#) Rat

[Omim: 138248](#) Human

[SwissProt: P42261](#) Human

[SwissProt: P23818](#) Mouse

[SwissProt: P19490](#) Rat

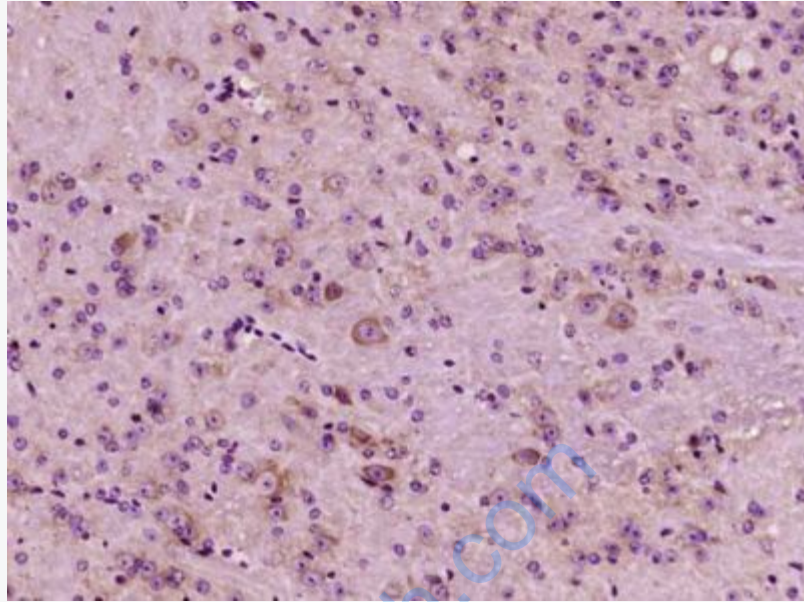
[Unigene: 519693](#) Human

[Unigene: 4920](#) Mouse

[Unigene: 29971](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Paraformaldehyde-fixed, paraffin embedded (Mouse brain); 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 (GluR1) Polyclonal Antibody, Unconjugated (SL10042R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.