



# GluR-1 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-16422
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	GRIA1
<b>Protein Name</b>	Glutamate receptor 1
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human GluR1. AA range:816-865
<b>Specificity</b>	GluR-1 Polyclonal Antibody detects endogenous levels of GluR-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>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	GRIA1; GLUH1; GLUR1; Glutamate receptor 1; GluR-1; AMPA-selective glutamate receptor 1; GluR-A; GluR-K1; Glutamate receptor ionotropic; AMPA 1; GluA1
<b>Observed Band</b>	95kD
<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**

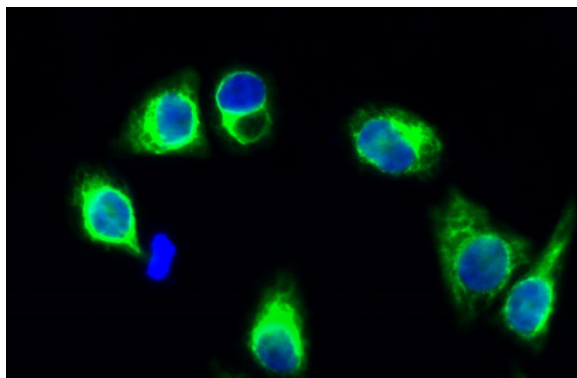
Avoid repeated freezing and thawing!

**Usage suggestions**

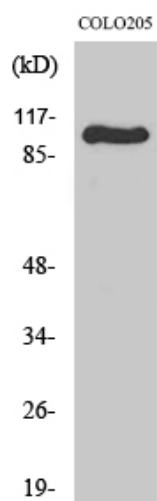
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



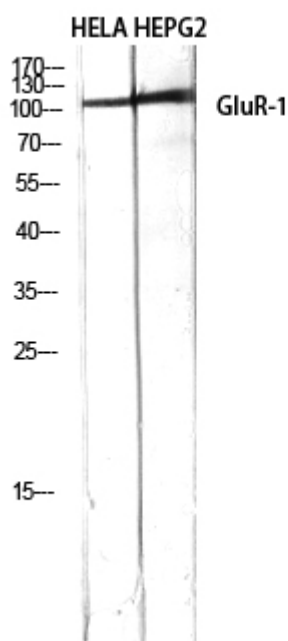
## Products Images



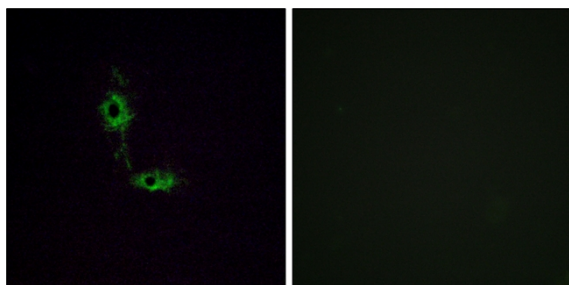
Immunofluorescence analysis of HeLa cell. 1, GluR-1 Polyclonal Antibody (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog: RS3211 was diluted at 1:1000 (room temperature, 50min). 3 DAPI (blue) 10min.



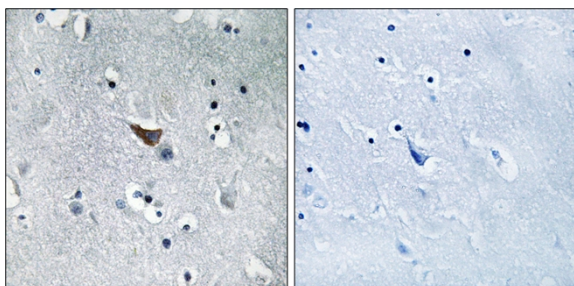
Western Blot analysis of various cells using GluR-1 Polyclonal Antibody diluted at 1:500



Western Blot analysis of HELA HEPG2 using GluR-1 Polyclonal Antibody diluted at 1:500



Immunofluorescence analysis of HeLa cells, using GluR1 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using GluR1 Antibody. The picture on the right is blocked with the synthesized peptide.