

GluR-1 (phospho Ser849) Polyclonal Antibody

Catalog No: YP1126

Reactivity: Human; Mouse; Rat

Applications: IHC;IF;ELISA

Target: GluR-1

Fields: >>cAMP signaling pathway;>>Neuroactive ligand-receptor

interaction;>>Circadian entrainment;>>Long-term potentiation;>>Retrograde

endocannabinoid signaling;>>Glutamatergic synapse;>>Dopaminergic

synapse;>>Long-term depression;>>Amyotrophic lateral sclerosis;>>Huntington disease;>>Spinocerebellar ataxia;>>Pathways of neurodegeneration - multiple

diseases;>>Amphetamine addiction;>>Nicotine addiction

Gene Name: GRIA1

Protein Name: Glutamate receptor 1

P42261

P23818

Human Gene Id: 2890

Human Swiss Prot

No:

Mouse Gene Id: 14799

Mouse Swiss Prot

No:

Rat Gene ld: 50592

Rat Swiss Prot No: P19490

Immunogen: The antiserum was produced against synthesized peptide derived from human

GluR1 around the phosphorylation site of Ser849. AA range:816-865

Specificity: Phospho-GluR-1 (S849) Polyclonal Antibody detects endogenous levels of

GluR-1 protein only when phosphorylated at S849.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

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Source: Polyclonal, Rabbit, IgG

Dilution : IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 102kD

Cell Pathway: Neuroactive ligand-receptor interaction;Long-term potentiation;Long-term

depression; Amyotrophic lateral sclerosis (ALS);

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],

Function: function:lonotropic 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

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 density membrane; Multi-pass membrane protein. Cell projection,

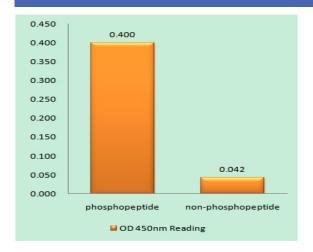
dendrite . Cell projection, dendritic spine . Early endosome membrane ; Multi-pass membrane protein . Recycling endosome membrane ; Multi-pass membrane protein . Cell junction, synapse, presynapse . Cell junction, synapse . Interaction with CACNG2, CNIH2 and CNIH3 promotes cell surface expression. Colocalizes



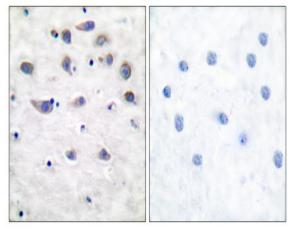
with PDLIM4 in early endosomes. Displays a somatodendritic localization and is excluded from axons in neurons (By similarity). Localized to cone photoreceptor pedicles (By similarity).

Expression: Widely expressed in brain.

Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using GluR1 (Phospho-Ser849) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using GluR1 (Phospho-Ser849) Antibody. The picture on the right is blocked with the phospho peptide.