

GluR-2 (phospho Ser880) Polyclonal Antibody

Catalog No: YP0849

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: GluR-2

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;>>Cocaine addiction;>>Amphetamine addiction;>>Nicotine addiction

Gene Name: GRIA2

Protein Name: Glutamate receptor 2

P42262

P23819

Human Gene Id: 2891

Human Swiss Prot

No:

Mouse Gene Id: 14800

Mouse Swiss Prot

No:

Rat Gene ld: 29627

Rat Swiss Prot No: P19491

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

GluR2 around the phosphorylation site of Ser880. AA range:834-883

Specificity: Phospho-GluR-2 (S880) Polyclonal Antibody detects endogenous levels of

GluR-2 protein only when phosphorylated at S880.

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

1/3



Source: Polyclonal, Rabbit,IgG

Dilution : WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. 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)

Observed Band: 99kD

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. This gene product belongs to a family of glutamate receptors that are sensitive to alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate (AMPA), and function as ligand-activated cation channels. These channels are assembled from 4 related subunits, GRIA1-4. The subunit encoded by this gene (GRIA2) is subject to RNA editing (CAG->CGG; Q->R) within the second transmembrane domain, which is thought to render the channel impermeable to Ca(2+). Human and animal studies suggest that pre-mRNA editing is essential for brain function, and defective GRIA2 RNA editing at the Q/R site may be relevant to amyotrophic

lateral sclerosis (ALS) etiology. Alternative splicing, resulting in transcript variants

enco

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-610 palmitoylation leads to Golgi retention and decreased cell surface expression. In contrast, Cys-836

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. Interaction with CACNG2, CNIH2 and CNIH3 promotes cell surface expression (By similarity).



Displays a somatodendritic localization and is excluded from axons in neurons (By similarity). .

Expression: Brain,

Tag: hot

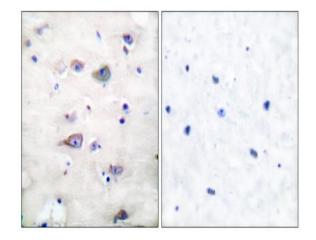
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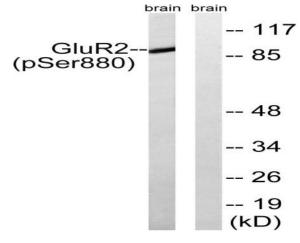
Host: Rabbit

Modifications: Phospho

Products Images



Immunohistochemistry analysis of paraffin-embedded human brain, using GluR2 (Phospho-Ser880) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from mouse brain, using GluR2 (Phospho-Ser880) Antibody. The lane on the right is blocked with the phospho peptide.