

## **Glutamate Receptor 1 Polyclonal Antibody**

Catalog No: YN5577

**Reactivity:** Human;Rat;Mouse

**Applications:** WB;IHC;IF

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 (GluR-1) (AMPA-selective glutamate receptor 1) (GluR-A)

(GluR-K1) (Glutamate receptor ionotropic, AMPA 1) (GluA1)

Human Gene Id: 2890

**Human Swiss Prot** 

No:

110.

**Mouse Swiss Prot** 

No:

Rat Swiss Prot No: P19490

**Immunogen:** Synthetic Peptide of Glutamate Receptor 1 AA range: 773-823

**Specificity:** The antibody detects endogenous Glutamate Receptor 1 protein

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

Source: Polyclonal, Rabbit, IgG

P42261

P23818

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200

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**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: 100kD

**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).

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**Expression :** Widely expressed in brain.

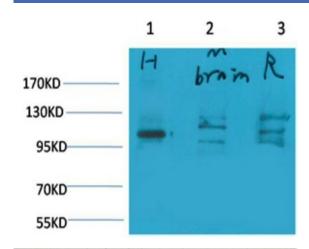
**Sort :** 17474

**No4**:

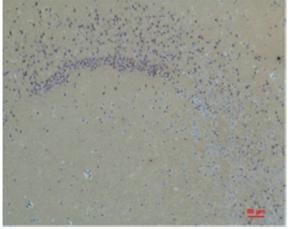
**Host:** Rabbit

Modifications: Unmodified

## **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.