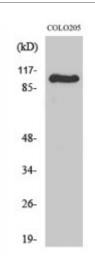


Anti-GluR-1 antibody



Description

Rabbit polyclonal to GluR-1.

Model STJ93286

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, IF, IHC, WB

Immunogen Synthesized peptide derived from human GluR-1 around the non-

phosphorylation site of S849.

Immunogen Region 790-870 aa

Gene ID <u>2890</u>

Gene Symbol GRIA1

Dilution range WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:40000

Specificity GluR-1 Polyclonal Antibody detects endogenous levels of GluR-1 protein.

Tissue Specificity Widely expressed in brain.

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

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Glutamate receptor 1 GluR-1 AMPA-selective glutamate receptor 1 GluR-A

GluR-K1 Glutamate receptor ionotropic, AMPA 1 GluA1

Molecular Weight 95 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

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

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:4571OMIM:138248</u>

Alternative Names Glutamate receptor 1 GluR-1 AMPA-selective glutamate receptor 1 GluR-A

GluR-K1 Glutamate receptor ionotropic, AMPA 1 GluA1

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. In the presence of CACNG4 or CACNG7 or CACNG8, shows resensitization which is characterized by a delayed accumulation of current

flux upon continued application of glutamate.

Sequence and Domain Family The M4 transmembrane segment mediates tetramerization and is required for

cell surface expression.

Cellular Localization Cell membrane Endoplasmic reticulum membrane Cell junction, synapse,

postsynaptic cell membrane Cell junction, synapse, postsynaptic cell membrane, postsynaptic density Cell projection, dendrite Cell projection, dendritic spine. Interaction with CACNG2, CNIH2 and CNIH3 promotes cell

surface expression.

Post-translational Palmitoylated. Depalmitoylated upon glutamate stimulation. Cys-603

Modifications 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 . Phosphorylated at Ser-645. Phosphorylated at Ser-710 by PKC. Phosphorylated at Ser-849 by PKC, PKA

and CAMK2. Phosphorylated at Ser-863 by PKC, PKA and PRKG2.

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