



GluR-2 Rabbit mAb

Catalog No	YP-rAb-17273
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,IP,ELISA
Gene Name	GRIA2 GLUR2
Protein Name	Glutamate receptor 2
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1:1000; WB 1:10000-1:50000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	GRIA2 ; GLUR2 ; Glutamate receptor 2 ; GluR-2 ; AMPA-selective glutamate receptor 2 ; GluR-B ; GluR-K2 ; Glutamate receptor ionotropic ; AMPA 2 ; GluA2
Observed Band	99kD
Calculated Molecular Weight	99kD
Cell Pathway	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). .
Tissue Specificity	Brain,
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-610 palmitoylation leads to Golgi retention and decreased cell surface expression. In contrast, Cys-836 palmitoylation does not affect cell surface expression but regulates stimulation-dependent endocytosis.,RNA editing:Partially edited. Fully edited in the brain. Heteromerically expressed edited GLUR2 (R) receptor complexes are impermeable to calcium, whereas the unedited (Q) forms are highly permeable to divalent ions.,similarity:Belongs to the glutamate-gated ion channel (TC 1.A.10) family.,subunit:Homotetramer or heterotetramer of pore-forming glutamate receptor subunits. Tetramers may be formed by the dimerization of dimers. May interact with MPP4. Forms a ternary complex with GRIP1 and CSPG4. Interacts with PRKCABP, GRIP1 and GRIP2.,

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

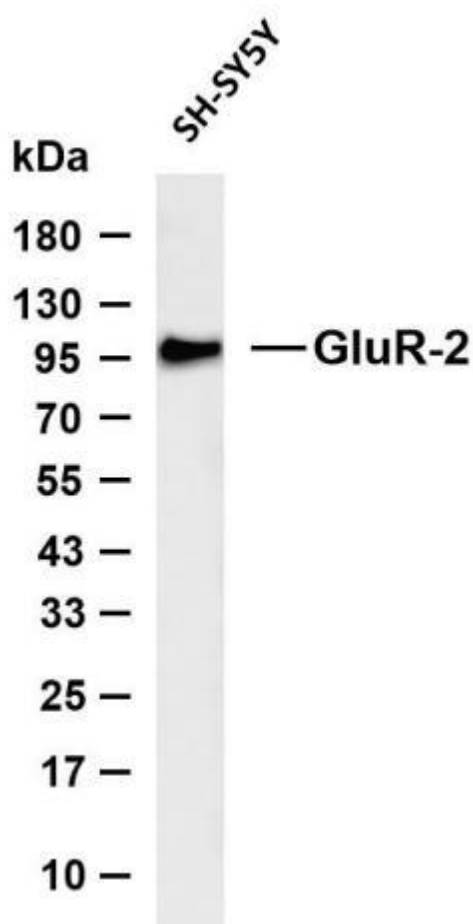
matters needing attention

Avoid repeated freezing and thawing!

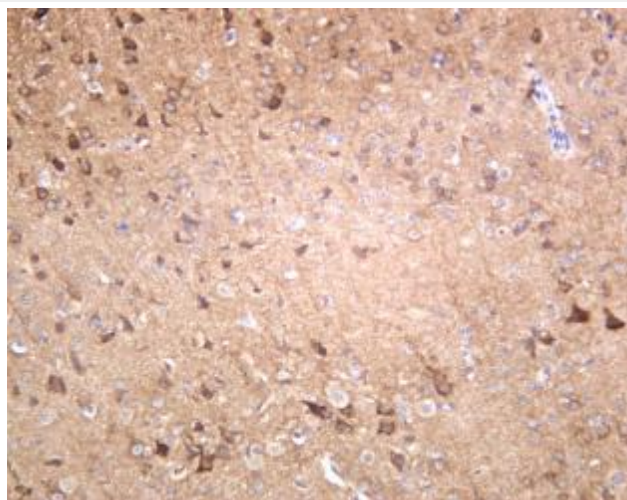
Usage suggestions

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





Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-GluR-2 antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: SH-SY5Y Predicted band size: 99kDa Observed band size: 99kDa



Mouse brain was stained with anti-GluR-2 Rabbit antibody

