

Basic Information

Product Name	Anti-GLUR1/GRIA1 Antibody
Gene Name	GRIA1
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human GRIA1, different from the related rat and mouse sequences by one amino acid.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	102 kDa
Dilution Ratios	Western blot (WB):1:500-2000

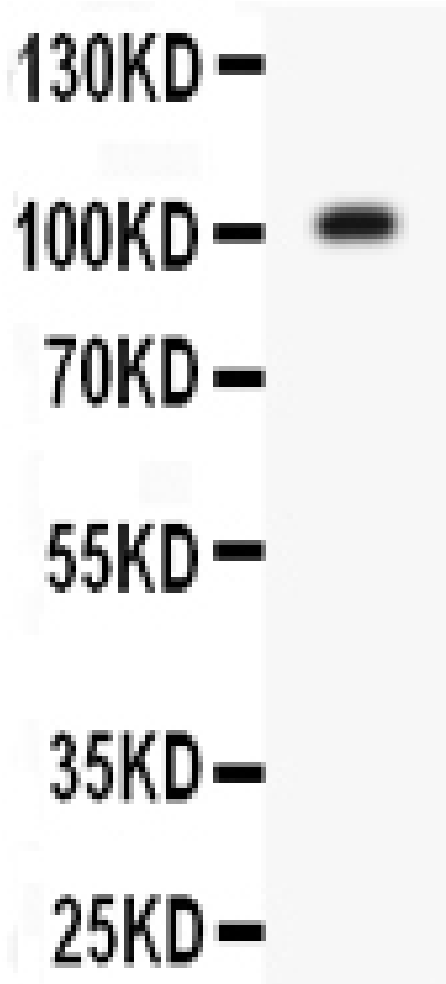
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

GLUR1, Glutamate receptor 1, is a protein that in humans is encoded by the GLUR1 gene. The sequence of GLUR1 was predicted to encode a 907-amino acid protein that had 97% identity to one of the rodent kainate receptor subunits. GLUR1 mRNA is widely expressed in human brain. 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. The GRIA1 belongs to a family of alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate (AMPA) receptors. Each of the members (GRIA1-4) include flip and flop isoforms generated by alternative RNA splicing. The receptor subunits encoded by each isoform vary in their signal transduction properties. The isoform presented here is the flop isoform. In situ hybridization experiments showed that human GRIA1 mRNA is present in granule and pyramidal cells in the hippocampal formation.

Selected Validation Data



Western blot analysis of GLUR1/GRIA1 using anti-GLUR1/GRIA1 antibody (BA0896). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Rat brain tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-GLUR1/GRIA1 antigen affinity purified polyclonal antibody (BA0896) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for GLUR1/GRIA1 at approximately 102 kDa. The expected band size for GLUR1/GRIA1 is at 102 kDa.