

GluA1/GluR1 Monoclonal Antibody

ORDERING INFORMATION

Catalog No.: 56547 (clone S355-1)
Size: 100ug in PBS, pH 7.4; 50% glycerol, 0.09% sodium azide. Purified by Protein G affinity chromatography.

BACKGROUND

Regulation of α -amino-3-hydroxy-5-methyl-4-isoxazole propionic acid receptors (AMPA) plays a key role in altering excitatory synaptic transmission in the CNS. Interestingly, the regulatory mechanisms differ between distinct subunits of AMPAR, which range from glutamate receptor 1 (GluR1) to GluR4 (also referred to as GluA1–4). For example, subunits with a long intracellular carboxy terminus (i.e., GluR1, GluR2L, and GluR4) are involved in activity-dependent synaptic targeting of AMPAR, whereas those with a shorter carboxy terminus (i.e., GluR2, GluR3, and GluR4s) seem to maintain basal synaptic transmission. GluR1 has several phosphorylation sites on the intracellular carboxy terminus. Many of these sites have been demonstrated to play a role in synaptic AMPAR regulation and synaptic plasticity.

SPECIFICATION SUMMARY

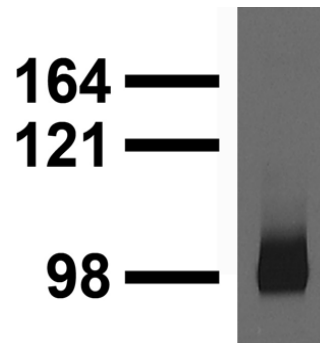
Antigen: Fusion protein corresponding to aa 1-389 (extracellular N-terminus) of rat GluA1/GluR1 (accession no. P19490).
Host Species: Mouse
Antibody Class: IgG1

SPECIFICITY

This antibody recognizes mouse and rat GluA1/GluR1. It does not cross-react with GluR2.

APPLICATIONS

Immunoblotting: use at 1ug/ml. A band of ~100kDa is detected.



Positive control: Rat brain lysate. These are recommended concentrations. User should determine optimal concentrations for their application.

DILUTION INSTRUCTIONS

Dilute in PBS or medium which is identical to that used in the assay system.

STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Avoid repeated freezing and thawing.

For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.