

## Anti-GluR1-Subunit (Ser831) Antibody

Our Anti-GluR1-Subunit (Ser831) rabbit polyclonal phosphospecific primary antibody from PhosphoSolut
Catalog # AN1416

# **Specification**

# Anti-GluR1-Subunit (Ser831) Antibody - Product Information

Primary Accession
Reactivity
Bovine
Host
Clonality
Polyclonal
Isotype

Calculated MW 101579

## Anti-GluR1-Subunit (Ser831) Antibody - Additional Information

Gene ID **50592** 

#### **Other Names**

GLUR 1 antibody, GLUR A antibody, AMPA 1 antibody, AMPA selective glutamate receptor 1 antibody, AMPA-selective glutamate receptor 1 antibody, GluA1 antibody, GLUH1 antibody, GluR K1 antibody, GluR-1 antibody, GluR-A antibody, GluR-K1 antibody, GLUR1 antibody, GLURA antibody, Glutamate receptor 1 antibody, Glutamate receptor ionotropic AMPA 1 antibody, Glutamate receptor ionotropic antibody, Glutamate receptor, ionotropic, AMPA 1 antibody, Gria1 antibody, GRIA1\_HUMAN antibody, HBGR1 antibody, MGC133252 antibody, OTTHUMP00000160643 antibody, OTTHUMP00000165781 antibody, THUMP00000224241 antibody, OTTHUMP00000224242 antibody, OTTHUMP00000224243 antibody

#### Target/Specificity

The ion channels activated by glutamate are typically divided into two classes. Those that are sensitive to N-methyl-D-aspartate (NMDA) are designated NMDA receptors (NMDAR) while those activated by  $\alpha$ -amino-3-hydroxy-5-methyl-4-isoxalone propionic acid (AMPA) are known as AMPA receptors (AMPAR). The AMPAR are comprised of four distinct glutamate receptor subunits designated (GluR1-4) and they play key roles in virtually all excitatory neurotransmission in the brain (Keinänen et al., 1990; Hollmann and Heinemann, 1994). The GluR1 subunit is widely expressed throughout the nervous system. GluR1 is potentiated by phosphorylation at Ser-831 which has been shown to be mediated by either PKC or CaM kinase II (McGlade-McCulloh et al., 1993; Mammen et al., 1999; Roche et al., 1996). In addition, phosphorylation of this site has been linked to synaptic plasticity as well as learning and memory (Soderling and Derkach, 2000).

### **Format**

Antigen Affinity Purified from Pooled Serum

# **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Anti-GluR1-Subunit (Ser831) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



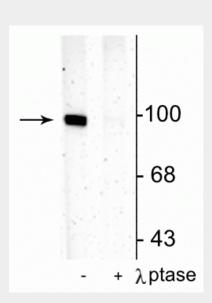
**Shipping** Blue Ice

# Anti-GluR1-Subunit (Ser831) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Anti-GluR1-Subunit (Ser831) Antibody - Images



Western blot of rat hippocampal lysate showing specific immunolabeling of the  $\sim 100$  kDa GluR1 protein phosphorylated at Ser831 in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is completely eliminated by blot treatment with lambda phosphatase ( $\lambda$ -Ptase, 1200 units for 30 min).

# Anti-GluR1-Subunit (Ser831) Antibody - Background

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