# Anti-Phospho-Ser^{845} GluR1 Antibody

**Catalog#:** p1160-845  \n**Size:** 150 µl

<table>
<thead>
<tr>
<th>Host</th>
<th>Applications</th>
<th>Species Tested</th>
<th>Species Reactivity*</th>
<th>Molecular Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rabbit</td>
<td>WB</td>
<td>M, R</td>
<td>H, NHP</td>
<td>~100 kDa</td>
</tr>
<tr>
<td></td>
<td>IHC</td>
<td>1:1000 (frozen sections)</td>
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</tbody>
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**Product Description:** Affinity purified rabbit polyclonal antibody.

**Biological Significance:** 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 α-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. Phosphorylation of Ser^{845} on GluR1 is thought to be mediated by PKA and phosphorylation of this site increases the conductance of the AMPAR (Roche et al., 1996; Banke et al., 2000). In addition, phosphorylation of this site has been linked to synaptic plasticity as well as learning and memory (Lee et al., 2003; Esteban et al., 2003).

**Antigen:** Phosphopeptide corresponding to amino acid residues surrounding the phospho-Ser^{845} of rat GluR1.

**Antibody Specificity:** Specific for endogenous levels of the ~100 kDa GluR1 protein phosphorylated at Ser^{845}. Immunolabeling is completely eliminated by treatment with λ-Ptase.

**Purification Method:** Prepared from pooled rabbit serum by affinity purification via sequential chromatography on phospho and non-phosphopeptide affinity columns.

**Quality Control Tests:** Western blots performed on each lot.

**Packaging:** 150 µl in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg BSA per ml and 50% glycerol.

**Storage and Stability:** Shipped on blue ice. Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.

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*Species assumed based on 100% homology with sequence used as antigen"
**Product Specific References:**


General References: