

## PRODUCT DATA SHEET

**Product Name:** ANTI-PHOSPHO-Ser<sup>880</sup> GluR2 ANTIBODY

**Product Code:** P40016-100

**Pack Size:** 100 µL

**Description:** 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 (AMPA). 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 number of GluR2 subunits in the AMPA receptor complex affects the Ca<sup>2+</sup> permeability, rectification and single-channel conductance of AMPA receptors. Ser<sup>880</sup> has been identified as the PKC phosphorylation site within the C-terminal region of GluR2 and has been shown to differentially regulate the interaction of the PDZ domain-containing proteins GRIP1 and PICK 1 (Matsuda et al., 1999)

**Physical State:** Liquid; Buffer contents: 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per mL BSA and 50% glycerol

**Storage/Stability:** Stable at -20 °C for at least 1 year. For long term storage -20 °C is recommended

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

**Shipping Conditions:** Domestic: Blue Ice  
International: Blue Ice or Dry Ice

**Host Species:** Rabbit (Polyclonal)

**Mr (kDa):** 100

**Immunogen:** Phosphopeptide corresponding to amino acid residues surrounding the phospho-Ser<sup>880</sup> of GluR2.

**Species Reactivity:** The antibody has been directly tested for reactivity in Western blots in rat tissues. It is anticipated that the antibody will react with chicken, human, mouse, non-human primate and Zebrafish tissues based on the fact that these species have 100% homology with the amino acid sequence used as antigen.

**Recommended Antibody Dilutions:**

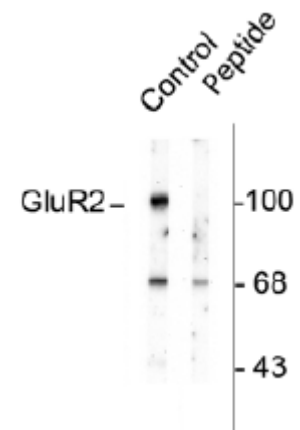
**WB: 1:1000**

**References:**

- Hollmann M et al. (1994) *Annu Rev Neurosci* 17:31-108.
- Keinänen K et al. (1990) *Science* 249:556-560.
- Soderling TR et al. (2000) *Trends Neurosci* 23:75-80.
- Matsuda S et al. (1999) *J. Neurochem* 73, 1765-1768.

**Western Blot**

Rat brain homogenate showing specific immunolabeling of the ~100k GluR2 protein phosphorylated at Ser<sup>880</sup> (control). Immunolabeling is blocked by reabsorption with the phospho-peptide used as antigen (Peptide) but not by the corresponding dephospho-peptide (not shown).



**Application Key:** WB – Western Blot IF – Immunofluorescence IHC – Immunohistochemistry IP - Immunoprecipitation