

Anti-Phospho-Ser880 GluR2 Antibody

Product Data Sheet · P/N 74098 Rev 01 · Reissued 2026-09-19 (layout only)

Product code	Pack size
P40016-100	100 µL
Host Species	Rabbit (Polyclonal)
Mr (kDa)	100

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 Ca²⁺ permeability, rectification and single-channel conductance of AMPA receptors. Ser880 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)

Immunogen

Phosphopeptide corresponding to amino acid residues surrounding the phospho- Ser880 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.

Physical State

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

Purification Method

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

Recommended Antibody Dilutions

WB: 1:1000

Storage/Stability

Stable at -20 °C for at least 1 year.

For long term storage -20 °C is recommended

Shipping Conditions

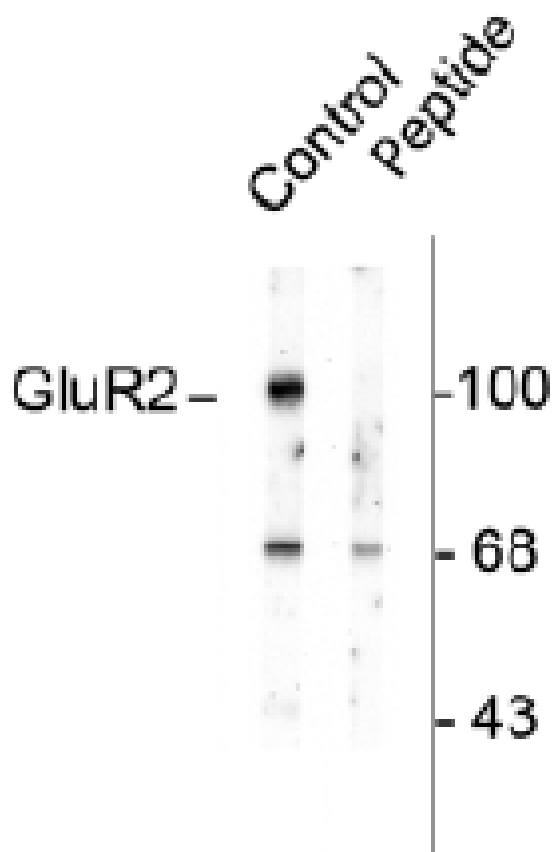
Domestic: Blue Ice

International: Blue Ice or Dry Ice

References

- 1) Hollmann M et al. (1994) Annu Rev Neurosci 17:31-108.
- 2) Keinänen K et al. (1990) Science 249:556-560.
- 3) Soderling TR et al. (2000) Trends Neurosci 23:75-80.

4) 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 Ser880 (control). Immunolabeling is blocked by readsorption with the phospho- peptide used as antigen (Peptide) but not by the corresponding dephospho-peptide (not shown).

For research use or further manufacturing only. Not for use in diagnostic procedures, or for human or animal consumption.