

DESCRIPTION

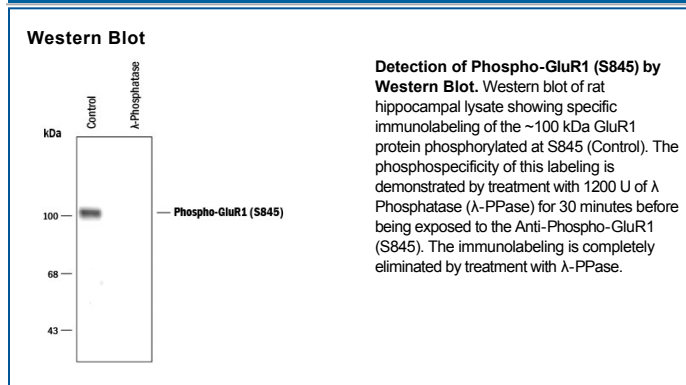
Species Reactivity	Human/Mouse/Rat/Primate
Specificity	Specific for the ~100 kDa GluR1 protein phosphorylated at S845 in Western blots
Source	Polyclonal Rabbit IgG
Purification	Antigen Affinity-purified
Immunogen	Phosphopeptide corresponding to amino acid residues surrounding the phospho-S845 of GluR1
Formulation	150 µL in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg/mL BSA and 50% glycerol. See Certificate of Analysis for details.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the [Technical Information](#) section on our website.

	Recommended Concentration	Sample
Western Blot	1:1000 dilution	See Below

DATA



PREPARATION AND STORAGE

Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	For long-term storage, ≤ -20° C is recommended. Product is stable at ≤ -20° C for at least 1 year.

BACKGROUND

Rat GluR1 is a 907 amino acid, 4-transmembrane protein that belongs to the glutamate-gated ion channel family. It is one of four AMPA receptor subunits that form a functional heterotetrameric glutamate receptor. GluR1 only interacts with GluR2. GluR1 has two key serine residues in the C-terminal extracellular region. Serine 831 is constitutively unphosphorylated. Upon exposure to a neurotransmitter, it is phosphorylated by CaMKII leading to a potentiation of glutamate-mediated current. Serine 845 is constitutively phosphorylated by Protein Kinase A (PKA). The presence of the phosphate insures membrane localization of the subunit. Following NMDA receptor activation, S845 is dephosphorylated with subsequent subunit internalization.