Anti-Phospho-GluR1 (AMPA subtype) (S831) Antibody [JE44-96]

HA721865

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB
Molecular Wt:	Predicted band size: 102 kDa
Clone number:	JE44-96

Description: Glutamate receptors mediate most excitatory neurotransmission in the brain and play an important role in neural plasticity, neural development and neurodegeneration. Ionotropic glutamate receptors are categorized into NMDA receptors and kainate/AMPA receptors, both of which contain glutamate-gated, cation-specific ion channels. Kainate/AMPA receptors are co-localized with NMDA receptors in many synapses and consist of seven structurally related subunits designated GluR-1 to -7. The kainate/AMPA receptors are primarily responsible for the fast excitatory neuro-transmission by glutamate whereas the NMDA receptors are functionally characterized by a slow kinetic and a high permeability for Ca2+ ions. The NMDA receptors consist of five subunits: epsilion 1, 2, 3, 4 and one zeta subunit. The zeta subunit is expressed throughout the brainstem whereas the four epsilon subunits display limited distribution.

Immunogen: Synthetic phosphopeptide corresponding to residues surrounding Ser831 of Glutamate Receptor 1

Positive control: Mouse brain tissue lysate, human brain tissue lysate.

Subcellular location: Cell membrane, Endoplasmic reticulum membrane, Cell junction, Cell projection.

Database links: SwissProt: P42261 Human | P23818 Mouse | P19490 Rat

Recommended Dilutions:

WB 1:1,000

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

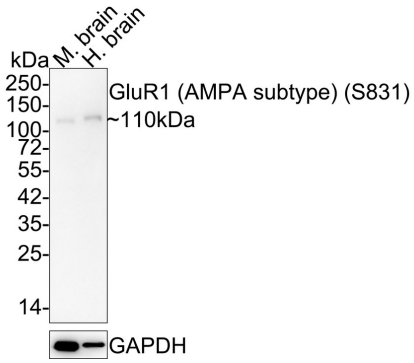

Fig1: Western blot analysis of Phospho-GluR1 (AMPA subtype) (S831) on different lysates with Rabbit anti-Phospho-GluR1 (AMPA subtype) (S831) antibody (HA721865) at 1/1,000 dilution.

Lane 1: Mouse brain tissue lysate
Lane 2: Human brain tissue lysate

Lysates/proteins at 30 µg/Lane.

Predicted band size: 102 kDa
Observed band size: 110 kDa

Exposure time: 1 minute;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA721865) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Background References

1. He XY et al. GluA1 signal peptide determines the spatial assembly of heteromeric AMPA receptors. Proc Natl Acad Sci U S A 113:E5645-54 (2016).
2. Han M & Kim J Effect of dietary iron loading on recognition memory in growing rats. PLoS One 10:e0120609 (2015).