



## NMDAR1 (Phospho-Ser897) Antibody

#12287

**Catalog Number:** 12287-1, 12287-2

**Amount:** 50µg/50µl, 100µg/100µl

**Swiss-Prot No. :** Q05586

**Form of Antibody:** Rabbit IgG in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

**Storage/Stability:** Store at -20°C/1 year

**Immunogen:** The antiserum was produced against synthesized phosphopeptide derived from Human NMDAR1 around the phosphorylation site of serine 897 (R-S-S<sub>P</sub>-K-D).

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

**Specificity/Sensitivity:** NMDAR1 (Phospho-Ser897) antibody detects endogenous levels of NMDAR1 only when phosphorylated at serine 897.

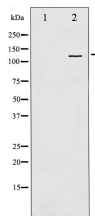
**Reactivity:** Human, Mouse, Rat

### Applications:

Predicted MW: 120 kd

WB : 1:500~1:1000

IHC : 1:50~1:200



Western blot analysis of NMDAR1 phosphorylation expression in LOVO whole cell lysates. The lane on the left is treated with the antigen-specific peptide.

### Background :

NMDA receptors are members of the ionotropic class of glutamate receptors, which also includes Kainate and AMPA receptors. NMDA receptors consist of NR1 subunits combined with one or more NR2 (A-D) or NR3 (A-B) subunits. The ligand-gated channel is permeable to cations including Ca<sup>2+</sup>, and at resting membrane potentials NMDA receptors are inactive due to a voltage-dependent blockade of the channel pore by Mg<sup>2+</sup>. NMDA receptor activation, which requires binding of glutamate and glycine, leads to an influx of Ca<sup>2+</sup> into the postsynaptic region where it activates several signaling cascades, including pathways leading to the induction of long-term potentiation (LTP) and depression (LTD). NMDA receptors have a critical role in excitatory synaptic transmission and plasticity in the CNS. They govern a range of physiological conditions including neurological disorders caused by excitotoxic neuronal injury, psychiatric disorders and neuropathic pain syndromes.