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## NMDAR1 (Ab-897)

Catalog Number: 21287-1, 21287-2 **Amount:** 50μg/50μl, 100μg/100μl

Swiss-Prot No.: Q05586

Form of Antibody: Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), 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 non-phosphopeptide derived from

Human NMDAR1 around the phosphorylation site of serine 897 (R-S-SP-K-D).

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using

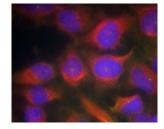
epitope-specific immunogen.

Specificity/Sensitivity:NMDAR1 (Ab-897) antibody detects endogenous levels of total NMDAR1 protein

Reactivity: Human, Mouse, Rat

Applications:

Predicted MW: 120 kd IF:1:100~1:200



Immunofluorescence staining of methanol-fixed HeLa cells using NMDAR1 (Ab-897) Antibody (#21287, Red).

## 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 Ca2+, and at resting membrane potentials NMDA receptors are inactive due to a voltage-dependent blockade of the channel pore by Mg2+. NMDA receptor activation, which requires binding of glutamate and glycine, leads to an influx of Ca2+ 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.

## References:

Tyszkiewicz JP, et al. J Physiol. 2004 Feb 1; 554(Pt 3): 765-777