

#21287

## NMDAR1 (Ab-897) Antibody

**Catalog:** #21287-1 50µl **Orders:** [order@signalwayantibody.com](mailto:order@signalwayantibody.com)  
#21287-2 100µl **Support:** [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)  
**Storage:** Store at -20°C/1 year **Web:** [www.signalwayantibody.com](http://www.signalwayantibody.com)



Application	Species Reactivity	Source	Molecular Wt.
IF	Human Mouse Rat	Rabbit Polyconal Ab	120KD

**Description:** Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.

**Specificity:** The antibody detects endogenous level of total NMDAR1 protein.

**Immunogen:** Peptide sequence around aa.895~899 (R-S-S-K-D) derived from Human NMDAR1.

**Formulation:** Supplied at 1.0mg/mL 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.

**Synonyms:** GLURZ1 GRIN1 NMD-R1 NMDZ1 NMZ1

**Accession No.:** Swiss-Prot#: Q05586 NCBI Gene#: 2902  
NCBI Protein#: NP\_000823.4

**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.

### References:

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

### Citation:

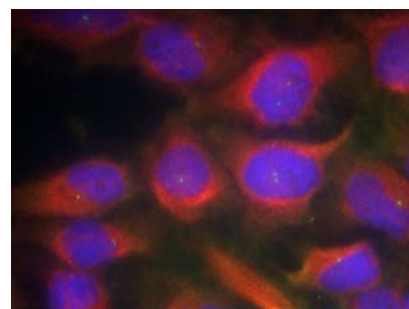
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**Related Pathway:** Neuroscience, Receptors, Channel

**Note:** For western blotting, incubate membrane with diluted antibody in 5% nonfat milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

### Recommended Dilutions:

Immunofluorescence 1:100~1:200



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