

# **Product datasheet for AP21047PU-M**

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# NMDAR1 (GRIN1) Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

Applications: IHC

Recommended Dilution: Immunohistochemistry on Paraffin Sections: 1/50-1/200.

Reactivity: Human, Mouse, Rat

Host: Rabbit
Clonality: Polyclonal

**Specificity:** This antibody detects endogenous levels of NMDAR1 protein (region surrounding Ser902).

**Formulation:** PBS, pH~7.2

State: Aff - Purified

State: Liquid purified Ig fraction (> 95% by SDS-PAGE)

Preservative: 0.05% Sodium Azide

**Concentration:** 1.0 mg/ml

**Purification:** Affinity Chromatography using epitope-specific immunogen

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

Predicted Protein Size: ~ 120 kDa

**Gene Name:** glutamate ionotropic receptor NMDA type subunit 1

Database Link: Entrez Gene 14810 MouseEntrez Gene 24408 RatEntrez Gene 2902 Human

Q05586





Background: NMDA receptor subtype of glutamate-gated ion channels possesses high calcium

> permeability and voltage-dependent sensitivity to magnesium. Mediated by glycine. Plays a key role in synaptic plasticity, synaptogenesis, excitotoxicity, memory acquisition and learning. It mediates neuronal functions in glutamate neurotransmission. Is involved in the cell surface targeting of NMDA receptors. The ion channels activated by glutamate are divided into two classes. Those that are sensitive to N-methyl-D-aspartate (NMDA) are designated NMDA receptors (NMDAR) while those activated by kainate and a-amino-3hydroxy-5-methyl-4-isoxalone propionic acid (AMPA) are known as kainate/AMPA receptors (K/AMPAR). NMDA receptors are among the most studied receptors in neuroscience because they are involved in neuronal cell development and plasticity, a cellular correlate for learning.

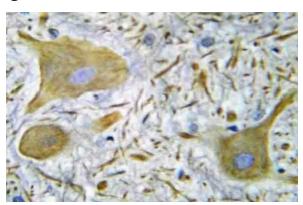
Synonyms: NMDAR1,GRIN1

**Protein Families:** Druggable Genome, Ion Channels: Glutamate Receptors, Transmembrane

**Protein Pathways:** Alzheimer's disease, Amyotrophic lateral sclerosis (ALS), Calcium signaling pathway,

Huntington's disease, Long-term potentiation, Neuroactive ligand-receptor interaction

## **Product images:**



Immunohistochemistry analysis of NMDAR1 antibody Cat.-No [AP21047PU-N] in paraffinembedded human spinal cord tissue.