

**Anti-NMDAR1 Picoband Antibody**  
**Catalog # ABO10215****Specification**

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**Anti-NMDAR1 Picoband Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q05586</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for NMDAR1 detection. Tested with WB in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-NMDAR1 Picoband Antibody - Additional Information**

**Gene ID** 2902

**Other Names**

Glutamate receptor ionotropic, NMDA 1, GluN1, Glutamate [NMDA] receptor subunit zeta-1, N-methyl-D-aspartate receptor subunit NR1, NMD-R1, GRIN1, NMDAR1

**Application Details**

Western blot, 0.1-0.5 µg/ml

**Subcellular Localization**

Cell membrane ; Enriched in postsynaptic plasma membrane and postsynaptic densities.

**Contents**

Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence of human NMDAR1 (FIEIAYKRHKDARRKQMQLAFAAVNVWRKNLQDRK).

**Cross Reactivity**

No cross reactivity with other proteins.

**Storage**

At -20°C; for one year. After reconstitution, at 4°C; for one month. It can also be aliquotted and stored frozen at -20°C; for a longer time. Avoid repeated freezing and thawing.

**Anti-NMDAR1 Picoband Antibody - Protein Information**

**Name** GRIN1

**Synonyms** NMDAR1

**Function**

Component of NMDA receptor complexes that function as heterotetrameric, ligand-gated ion channels with high calcium permeability and voltage-dependent sensitivity to magnesium. Channel activation requires binding of the neurotransmitter glutamate to the epsilon subunit, glycine binding to the zeta subunit, plus membrane depolarization to eliminate channel inhibition by Mg(2+) (PubMed:<a href="http://www.uniprot.org/citations/7685113" target="\_blank">7685113</a>, PubMed:<a href="http://www.uniprot.org/citations/28126851" target="\_blank">28126851</a>, PubMed:<a href="http://www.uniprot.org/citations/26919761" target="\_blank">26919761</a>, PubMed:<a href="http://www.uniprot.org/citations/26875626" target="\_blank">26875626</a>, PubMed:<a href="http://www.uniprot.org/citations/28105280" target="\_blank">28105280</a>). Sensitivity to glutamate and channel kinetics depend on the subunit composition (PubMed:<a href="http://www.uniprot.org/citations/26919761" target="\_blank">26919761</a>).

**Cellular Location**

Cell membrane; Multi-pass membrane protein. Postsynaptic cell membrane. Postsynaptic density. Note=Enriched in postsynaptic plasma membrane and postsynaptic densities.

**Anti-NMDAR1 Picoband Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-NMDAR1 Picoband Antibody - Images**

**Anti-NMDAR1 Picoband Antibody - Background**

Glutamate [NMDA] receptor subunit zeta-1 is a protein that in humans is encoded by the GRIN1 gene. The protein encoded by this gene is a critical subunit of N-methyl-D-aspartate receptors, members of the glutamate receptor channel superfamily which are heteromeric protein complexes with multiple subunits arranged to form a ligand-gated ion channel. These subunits play a key role in the plasticity of synapses, which is believed to underlie memory and learning. Cell-specific factors are thought to control expression of different isoforms, possibly contributing to the functional diversity of the subunits. Alternatively spliced transcript variants have been described.