

Anti-NMDAR1 GRIN1 Rabbit Monoclonal Antibody
Catalog # ABO13873**Specification**

Anti-NMDAR1 GRIN1 Rabbit Monoclonal Antibody - Product Information

Application	WB
Primary Accession	Q05586
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

Description

Anti-NMDAR1 GRIN1 Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human, Mouse, Rat.

Anti-NMDAR1 GRIN1 Rabbit Monoclonal 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

Calculated MW

105373 MW KDa

Application Details

WB 1:500-1:2000

Subcellular Localization

Cell membrane ; Multi-pass membrane protein. Cell junction, synapse, postsynaptic cell membrane. Cell junction, synapse, postsynaptic cell membrane, postsynaptic density. Enriched in postsynaptic plasma membrane and postsynaptic densities..

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human NMDAR1

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-NMDAR1 GRIN1 Rabbit Monoclonal Antibody - Protein Information

Name GRIN1 ([HGNC:4584](#))

Function

Component of N-methyl-D-aspartate (NMDA) receptors (NMDARs) that function as heterotetrameric, ligand-gated cation channels with high calcium permeability and voltage-dependent block by $Mg(2+)$ (PubMed:21376300, PubMed:26875626, PubMed:26919761, PubMed:28126851, PubMed:28228639, PubMed:36959261, PubMed:7679115, PubMed:7681588, PubMed:7685113). NMDARs participate in synaptic plasticity for learning and memory formation by contributing to the long-term potentiation (LTP) (PubMed:26875626). Channel activation requires binding of the neurotransmitter L-glutamate to the GluN2 subunit, glycine or D-serine binding to the GluN1 subunit, plus membrane depolarization to eliminate channel inhibition by $Mg(2+)$ (PubMed:21376300, PubMed:26875626, PubMed:26919761, PubMed:27164704, PubMed:28095420, PubMed:28105280, PubMed:28126851, PubMed:28228639, PubMed:36959261, PubMed:38538865, PubMed:7679115, PubMed:7681588, PubMed:7685113). NMDARs mediate simultaneously the potassium efflux and the influx of calcium and sodium (By similarity). Each GluN2 or GluN3 subunit confers differential attributes to channel properties, including activation, deactivation and desensitization kinetics, pH sensitivity, $Ca2(+)$ permeability, and binding to allosteric modulators (PubMed:26875626, PubMed:26919761, PubMed:36309015, PubMed:38598639).

Cellular Location

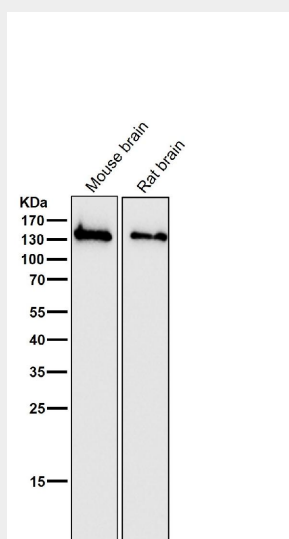
Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:P35439}. Postsynaptic cell membrane {ECO:0000250|UniProtKB:P35438}. Postsynaptic density membrane {ECO:0000250|UniProtKB:P35439}. Synaptic cell membrane {ECO:0000250|UniProtKB:P35438}. Note=Synaptic cell membrane targeting is dependent of GRIN2B/GluN2B subunit (By similarity). Association with GRIN3A occurs in the endoplasmic reticulum (By similarity) {ECO:0000250, ECO:0000250|UniProtKB:P35438, ECO:0000250|UniProtKB:P35439}

Anti-NMDAR1 GRIN1 Rabbit Monoclonal Antibody - Protocols

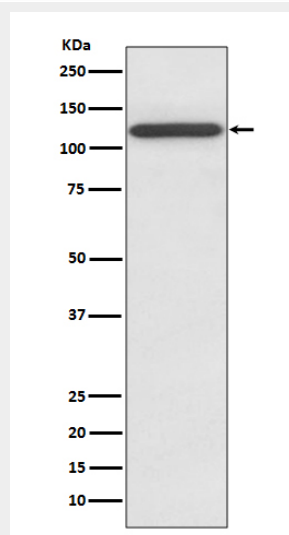
Provided below are standard protocols that you may find useful for product applications.

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

Anti-NMDAR1 GRIN1 Rabbit Monoclonal Antibody - Images



All lanes use the Antibody at 1:3K dilution for 1 hour at room temperature.



Western blot analysis of NMDAR1 expression in mouse brain lysate.