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Anti-NMDAR1 GRIN1 Rabbit Monoclonal Antibody

Catalog # ABO13873

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.

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
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..
Source	Eukaryota
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.
Clone Names	Clone: AAHF-7
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.

Protein Information

Name	GRIN1 (HGNC:4584)

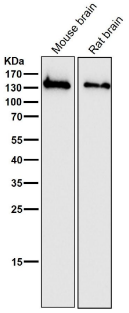
Function

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).

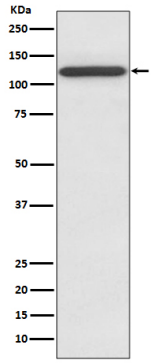
Cellular Location

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}

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.