

Datasheet for ABIN7043233

anti-GRIN3A antibody (Extracellular)



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1 Image

Overview

Quantity:	50 µL
Target:	GRIN3A
Binding Specificity:	AA 502-516, Extracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GRIN3A antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to NMDA Receptor 3A (GRIN3A)
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)RHKTHFQHPNKLHLR, corresponding to amino acid residues 502-516 of rat NMDAR3A
Isotype:	IgG
Specificity:	Extracellular, N-terminus
Cross-Reactivity:	Mouse, Rat
Predicted Reactivity:	Mouse,human - 14,15 amino acid residues identical
Characteristics:	Anti-NMDAR3A (GRIN3A) (extracellular) Antibody is directed against an extracellular epitope of rat NMDA receptor 3A (NR3A). Anti-NMDAR3A (GRIN3A) (extracellular) Antibody

Product Details

(ABIN7043233, ABIN7044364 and ABIN7044365) can be used in western blot analysis and has been designed to recognize NR3A from rat, mouse and human samples.

Purification: Affinity purified on immobilized antigen.

Target Details

Target: GRIN3A

Alternative Name: GRIN3A ([GRIN3A Products](#))

Background: NR3A, NMDAR-L, GluN3A, Ionotropic glutamate receptor NMDA 3A, N-methyl-D-aspartate subunit 3A, The NMDA receptors (NMDARs) are members of the glutamate receptor family of ion channels that also include the AMPA and Kainate receptors. The NMDA receptors are encoded by seven genes: one NMDAR1 (or NR1) subunit, four NR2 (NR2A-NR2D) and two NR3 (NR3A-NR3B) subunits. The functional NMDA receptor appears to be a heterotetramer composed of two NMDAR1 and two NMDAR2 subunits. Whereas the NMDAR2 subunits that assemble with the NMDAR1 subunit can be either of the same kind (i.e. two NMDAR2A subunits) or different (one NMDAR2A with one NMDAR2B). NMDAR3 subunits can substitute the NMDAR2 subunits in their complex with the NMDAR1 subunit. The NMDAR is unique among ligand-gated ion channels in that it requires the simultaneous binding of two obligatory agonists: glycine and glutamate that bind to the NMDAR1 and NMDAR2 binding sites respectively. Another unique characteristic of the NMDA receptors is their dependence on membrane potential. At resting membrane potentials the channels are blocked by extracellular Mg^{2+} . Neuronal depolarization relieves the Mg^{2+} blockage and allows ion influx into the cells. NMDA receptors are strongly selective for Ca^{2+} influx differing from the other glutamate receptor ion channels that are non-selective cation channels. Ca^{2+} entry through the NMDAR regulates numerous downstream signaling pathways including long term potentiation (a molecular model of memory) and synaptic plasticity that may underlie learning. In addition, the NMDA receptors have been implicated in a variety of neurological disorders including epilepsy, ischemic brain damage, Parkinson's and Alzheimer's disease. The expression and function of NMDA receptors are modulated by a variety of factors including receptor trafficking to the synapses and internalization as well as phosphorylation and interaction with other intracellular proteins.

Alternative names: NMDAR3A (GRIN3A), NR3A, NMDAR-L, GluN3A, Ionotropic glutamate receptor NMDA 3A, N-methyl-D-aspartate subunit 3A

Gene ID: 191573

Target Details

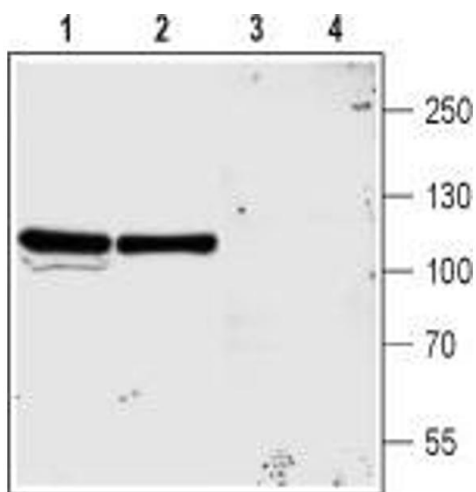
NCBI Accession:	NM_133445
UniProt:	Q9R1M7
Pathways:	Synaptic Membrane

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: N/A Application Dilutions Western blot wb: 1:200
Comment:	Negative Control: (ABIN7235638) Blocking Peptide: (ABIN7235638)
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Reconstitute with double distilled water (DDW) to a concentration of 1.0 mg/mL.
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).



Western Blotting

Image 1. Western blot analysis of rat (lanes 1 and 3) and mouse (lanes 2 and 4) brain membranes: - 1,2. Anti-NMDAR3A (GRIN3A) (extracellular) Antibody (ABIN7043233, ABIN7044364 and ABIN7044365), (1:200).3,4. Anti-NMDAR3A (GRIN3A) (extracellular) Antibody, preincubated with NMDAR3A/GRIN3A (extracellular) Blocking Peptide (#BLP-GC030).