

Goat Anti-NMDA receptor 1 / GRIN1 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1735a**Specification**

Goat Anti-NMDA receptor 1 / GRIN1 Antibody - Product Information

Application	WB, IF
Primary Accession	Q05586
Other Accession	NP_015566 , 2902 , 14810 (mouse) , 24408 (rat)
Reactivity	Rat
Predicted	Human, Mouse, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	105373

Goat Anti-NMDA receptor 1 / GRIN1 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

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-NMDA receptor 1 / GRIN1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-NMDA receptor 1 / GRIN1 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:7685113, PubMed:28126851, PubMed:26919761, PubMed:26875626, PubMed:28105280). Sensitivity to glutamate and channel kinetics depend on the subunit composition (PubMed:26919761).

Cellular Location

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

Goat Anti-NMDA receptor 1 / GRIN1 Antibody - Protocols

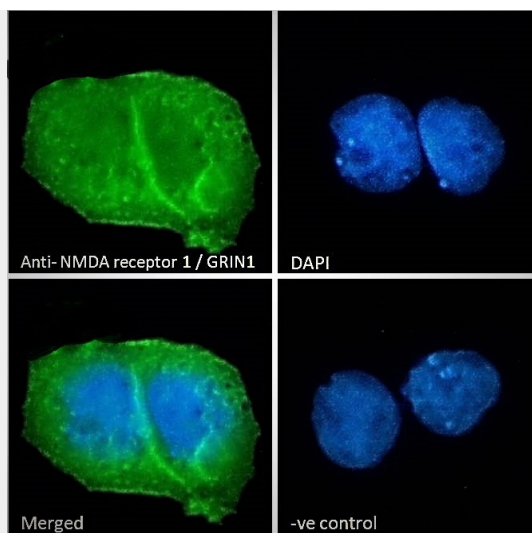
Provided below are standard protocols that you may find useful for product applications.

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

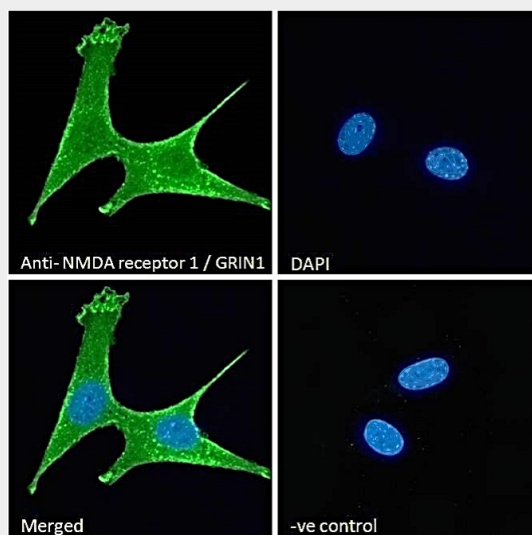
Goat Anti-NMDA receptor 1 / GRIN1 Antibody - Images



AF1735a (2 μ g/ml) staining of Rat Brain lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



EB07341 Immunofluorescence analysis of paraformaldehyde fixed MCF7 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing plasma membrane and cytoplasmic staining. The nuc



EB07341 Immunofluorescence analysis of paraformaldehyde fixed NIH3T3 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing plasma membrane and cytoplasmic staining. The nu

Goat Anti-NMDA receptor 1 / GRIN1 Antibody - Background

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.

Goat Anti-NMDA receptor 1 / GRIN1 Antibody - References

A possible association of responsiveness to adrenocorticotrophic hormone with specific GRIN1 haplotypes in infantile spasms. Ding YX, et al. Dev Med Child Neurol, 2010 Aug 16. PMID 20722663. Association study of 182 candidate genes in anorexia nervosa. Pinheiro AP, et al. Am J Med Genet B Neuropsychiatr Genet, 2010 Jul. PMID 20468064.

Association analysis of GRIN1 and GRIN2B polymorphisms and Parkinson's disease in a hospital-based case-control study. Wu SL, et al. Neurosci Lett, 2010 Jul 5. PMID 20438806.

New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al. Genes Immun, 2010 Apr. PMID 20237496.

A peripheral neuroimmune link: glutamate agonists upregulate NMDA NR1 receptor mRNA and protein, vimentin, TNF-alpha, and RANTES in cultured human synoviocytes. McNearney TA, et al. Am J Physiol Regul Integr Comp Physiol, 2010 Mar. PMID 20007519.