

GluN1/NR1 Antibody
GluN1/NR1 NMDA Antibody, Clone S308-48
Catalog # ASM10244

Specification

GluN1/NR1 Antibody - Product Information

Application	WB
Primary Accession	P35439
Other Accession	NP_058706.1
Host	Mouse
Isotype	IgG1
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Format	RPE

Description

Mouse Anti-Rat GluN1/NR1 Monoclonal IgG1

Target/Specificity

Detects ~105kDa.

Other Names

NMDAR1 Antibody, NMDA Receptor 1 Antibody, NMDAR Antibody, NMDA1 Antibody, GRIN1 Antibody, Glutamate [NMDA] receptor subunit zeta-1 Antibody, Glutamate receptor ionotropic N methyl D aspartate 1 Antibody, MRD8 Antibody, N methyl D aspartate receptor Antibody, N methyl D aspartate receptor channel subunit zeta 1 Antibody, N methyl D aspartate receptor subunit NR1 Antibody, NMD-R1 Antibody, NMDA 1 Antibody, NMDA R1 Antibody, NMDZ1_HUMAN Antibody, NR1 Antibody, GluN1 Antibody

Immunogen

Fusion protein amino acids 42-361 (extracellular N-terminus) of rat NR1

Purification

Protein G Purified

Storage **-20°C**

Storage Buffer

PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature **Blue Ice or 4°C**

Certificate of Analysis

1 µg/ml of SMC-410 was sufficient for detection of NR1 glutamate receptor in 20 µg of rat brain membrane lysate and assayed by colorimetric immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization

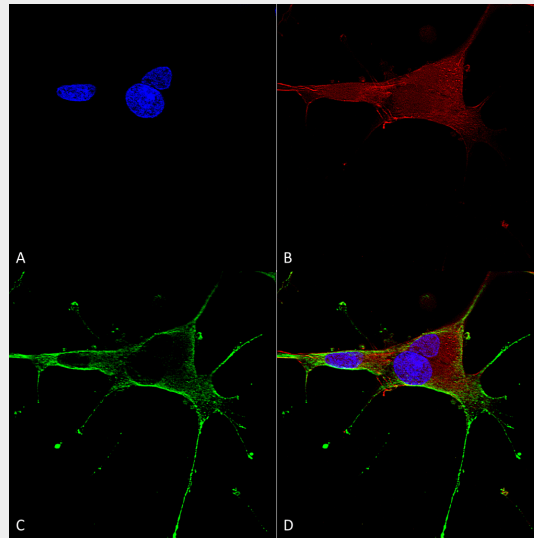
Cell Membrane | Cell Junction | Synapse | Postsynaptic Cell Membrane

GluN1/NR1 Antibody - Protocols

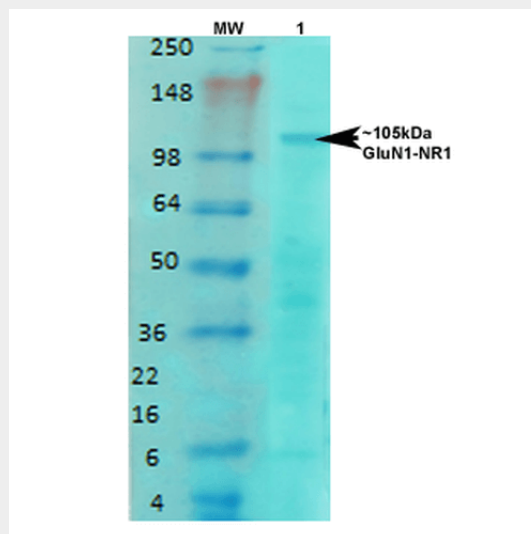
Provided below are standard protocols that you may find useful for product applications.

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

GluN1/NR1 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-GluN1/NR1 Monoclonal Antibody, Clone N308/48 (ASM10244). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-GluN1/NR1 Monoclonal Antibody (ASM10244) at 1:50 for overnight at 4°C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain; Hoechst (blue) nuclear stain at 1:800, 1.6mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) GluN1/NR1 Antibody (D) Composite.



Western Blot analysis of Rat brain membrane lysate showing detection of NMDAR1 NMDA receptor protein using Mouse Anti-NMDAR1 NMDA receptor Monoclonal Antibody, Clone N308/48

(ASM10244). Primary Antibody: Mouse Anti-NMDAR1 NMDA receptor Monoclonal Antibody (ASM10244) at 1:1000.

GluN1/NR1 Antibody - Background

The NMDA receptor (NMDAR), a glutamate receptor, is the predominant molecular device for controlling synaptic plasticity and memory function (1). The NMDA receptor forms a heterotetramer between two NR1 and two NR2 subunits (the subunits are also called glutamate-binding NMDA receptor subunits or GluN for short); two obligatory NR1 subunits and two regionally localized NR2 subunits. A related gene family of NR3 A and B subunits have an inhibitory effect on receptor activity. Multiple receptor isoforms with distinct brain distributions and functional properties arise by selective splicing of the NR1 transcripts and differential expression of the NR2 subunits.

GluN1/NR1 Antibody - References

1. Li F., and Tsien J.Z. (2009) New England J. Medicine. 361: 302-303.
2. Garcia-Gallo M., Renart J., Diaz-Guerra M. (2001) Biochem J. 356: 539-547.
3. Atlason P.T., Garside M.L., Meddows E., Whiting P., McIlhinney R.A.J. (2007) J Biol Chem. 282(35): 25299-25307.