

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

**Specification**

**GluN1/NR1 Antibody - Product Information**

Application **ICC/IF, WB**  
Primary Accession [P35439](#)  
Other Accession [NP\\_058706.1](#)  
Host **Mouse**  
Isotype **IgG1**  
Reactivity **Human, Mouse, Rat**  
Clonality **Monoclonal**

**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**

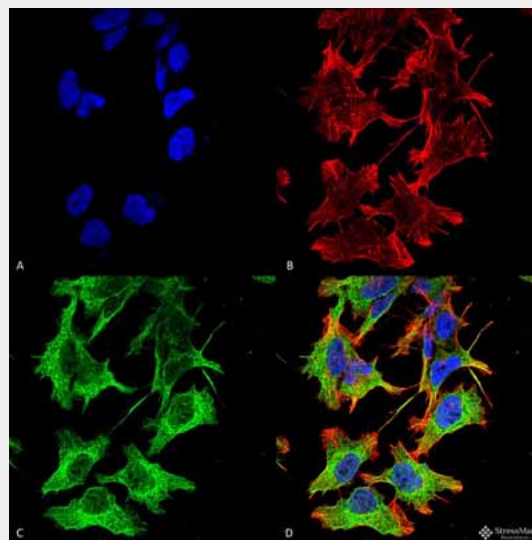
PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping **Blue Ice or 4°C**

Temperature

**Certificate of Analysis**

1 µg/ml of SMC-410 was sufficient for detection of NR1 glutamate receptor in 20



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-GluN1/NR1 Monoclonal Antibody, Clone S308-48 (ASM10244). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-GluN1/NR1 Monoclonal Antibody (ASM10244) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Localization: Cell Membrane. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) GluN1/NR1 Antibody (D) Composite.

µg of rat brain membrane lysate and assayed by colorimetric immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody.

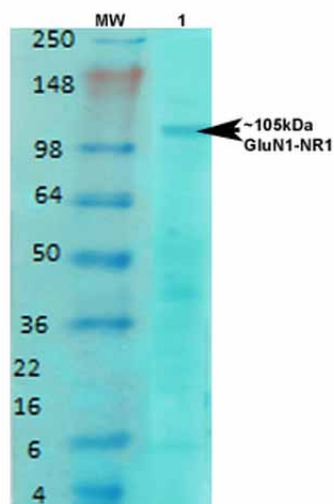
#### Cellular Localization

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](#)



Western Blot analysis of Rat brain membrane lysate showing detection of NMDAR1 NMDA receptor protein using Mouse Anti-NMDAR1 NMDA receptor Monoclonal Antibody, Clone S308-48 (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.