

**GluN2B/NR2B Antibody**  
**GluN2B/NR2B Antibody, Clone S59-36**  
**Catalog # ASM10213**

**Specification**

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**GluN2B/NR2B Antibody - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">Q00960</a>
Other Accession	<a href="#">NP_036706.1</a>
Host	<b>Mouse</b>
Isotype	<b>IgG2b</b>
Reactivity	<b>Human, Mouse, Rat</b>
Clonality	<b>Monoclonal</b>

**Description**

Mouse Anti-Rat GluN2B/NR2B Monoclonal IgG2b

**Target/Specificity**

Detects ~166kDa. No cross-reactivity against NR2A.

**Other Names**

NMDAR2B Antibody, hNR3 Antibody, MGC142180 Antibody, glutamate receptor subunit epsilon-2 Antibody, NR3 Antibody

**Immunogen**

Fusion protein amino acids 20-271 (extracellular N-terminus) of rat NR2B

**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-337 was sufficient for detection of NR2B in 10 µg of rat brain lysate by colorimetric immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization**

Cell Membrane | Cell Junction | Synapse | Postsynaptic Cell Membrane

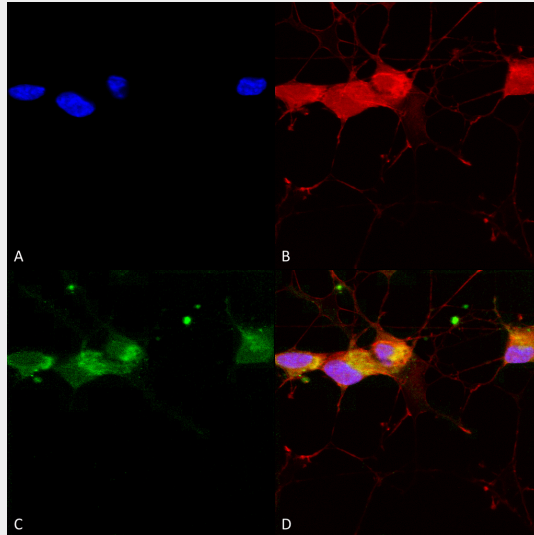
**GluN2B/NR2B Antibody - Protocols**

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

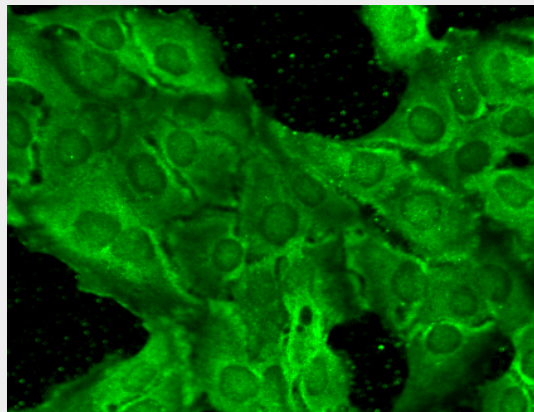
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

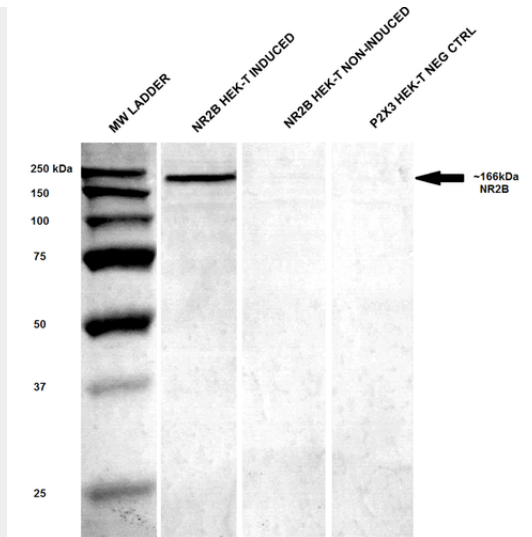
### GluN2B/NR2B Antibody - Images



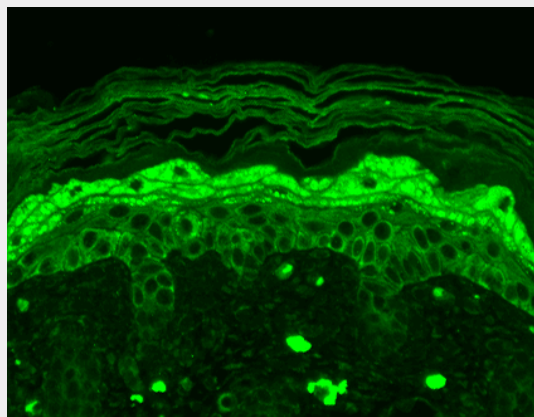
Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-GluN2B/NR2B Monoclonal Antibody, Clone S59-36 (ASM10213). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-GluN2B/NR2B Monoclonal Antibody (ASM10213) at 1:50 for overnight 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) GluN2B/NR2B Antibody (D) Composite.



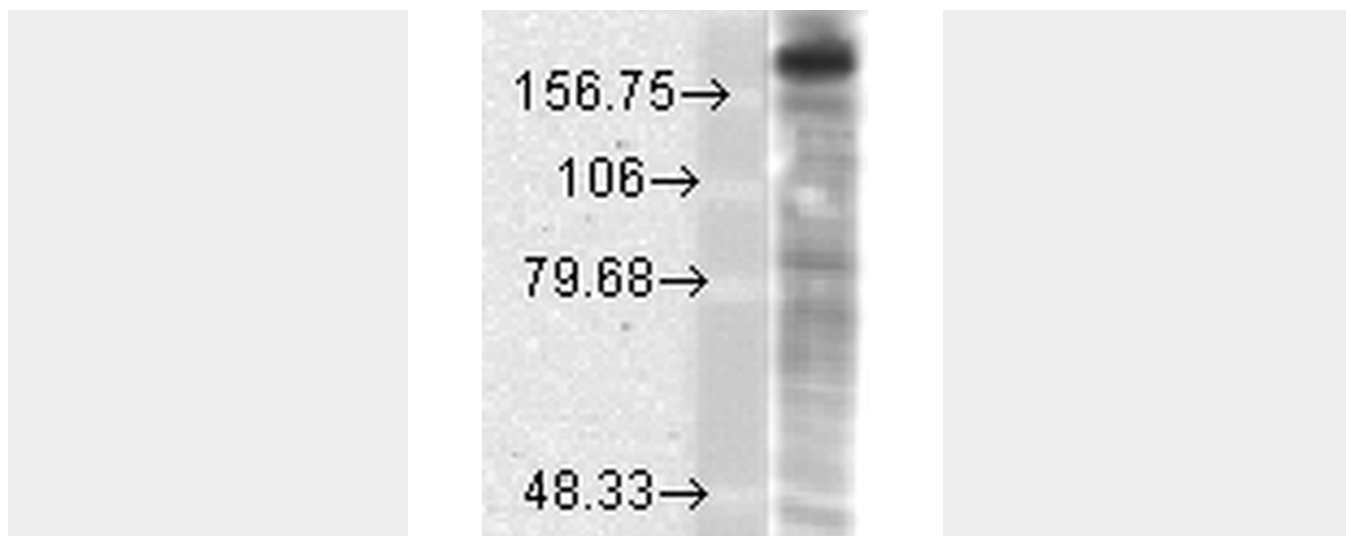
Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-GluN2B/NR2B Monoclonal Antibody, Clone S59-36 (ASM10213). Tissue: HaCaT cells. Species: Human. Fixation: Cold 100% methanol for 10 minutes at -20°C. Primary Antibody: Mouse Anti-GluN2B/NR2B Monoclonal Antibody (ASM10213) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Everything positive.



Western Blot analysis of Human Embryonic kidney epithelial cell line (HEK293T) lysate showing detection of GluN2B/NR2B protein using Mouse Anti-GluN2B/NR2B Monoclonal Antibody, Clone S59-36 (ASM10213). Primary Antibody: Mouse Anti-GluN2B/NR2B Monoclonal Antibody (ASM10213) at 1:250.



Immunohistochemistry analysis using Mouse Anti-GluN2B/NR2B Monoclonal Antibody, Clone S59-36 (ASM10213). Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-GluN2B/NR2B Monoclonal Antibody (ASM10213) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Filaggrin-like staining, and dermal staining.



Western Blot analysis of Rat brain membrane lysate showing detection of GluN2B/NR2B protein using Mouse Anti-GluN2B/NR2B Monoclonal Antibody, Clone S59-36 (ASM10213). Load: 15  $\mu$ g. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-GluN2B/NR2B Monoclonal Antibody (ASM10213) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.

#### **GluN2B/NR2B Antibody - Background**

NR2B containing receptors have been implicated in synaptic plasticity, memory formation and pain modulation (1). Studies suggest that the NR2B subunit of glutamate receptors may be potential targets for relieving pain; NR2B may be a probable target for anti-nociceptive drugs, and may also be useful as analgesics (2).

#### **GluN2B/NR2B Antibody - References**

1. Zhuo M. (2009) Mol Brain. 2(1): 4
2. Gurwitz D, and Weizman A. (2002) Drug Discovery Today, 7(7): 403-406.