

**GluA1/GluR1 Glutamate Receptor Antibody**  
**GluA1/GluR1 Glutamate Receptor Antibody, Clone S355-1**  
**Catalog # ASM10274**

## Specification

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### GluA1/GluR1 Glutamate Receptor Antibody - Product Information

Application	<b>WB</b>
Primary Accession	<a href="#">P19490</a>
Other Accession	<a href="#">NP_113796</a>
Host	<b>Mouse</b>
Isotype	<b>IgG1</b>
Reactivity	<b>Human, Mouse, Rat</b>
Clonality	<b>Monoclonal</b>

#### Description

Mouse Anti-Rat GluA1/GluR1 Glutamate Receptor Monoclonal IgG1

#### Target/Specificity

Detects ~100kDa. Does not cross-react with GluR2.

#### Other Names

AMPA 1 Antibody, AMPA selective glutamate receptor 1 Antibody, Glutamate receptor 1 Antibody, GluA1 Antibody, GLUH 1 Antibody, GluR K1 Antibody, GluRK1 Antibody, Glr-1 Antibody, Glur-1 Antibody, HIPA Antibody, Glur1 Antibody, GluR-A Antibody, AI853806 Antibody, 2900051M01Rik Antibody, GluRA Antibody, Glr1 Antibody, MGC13325 Antibody, GLUH1 Antibody, GluA1 Antibody, GLUR1 Antibody, HBGR1 Antibody, GLURA Antibody, gluR- Antibody, GluA1 Antibody, Glutamate receptor ionotropic AMPA 1 Antibody, Glutamate receptor ionotropic Antibody, Gria 1 Antibody, HBGR1 Antibody, OTTHUMP00000160643 Antibody, OTTHUMP00000165781 Antibody, OTTHUMP00000224241 Antibody, OTTHUMP00000224242 Antibody, OTTHUMP00000224243 Antibody

#### Immunogen

Fusion protein amino acids 1-389 (extracellular N-terminus) of rat GluA1/GluR1

#### Purification

Protein G Purified

Storage **-20°C**

#### Storage Buffer

PBS pH 7.4, 50% glycerol, 0.1% sodium azide

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

#### Certificate of Analysis

1 µg/ml of SMC-440 was sufficient for detection of GluA1/GluR1 in 20 µg of mouse brain membrane lysate and assayed by colorimetric immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody.

#### Cellular Localization

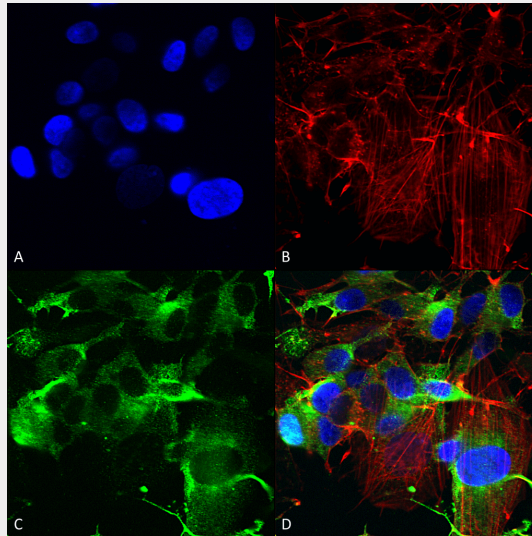
Cell Membrane | Endoplasmic Reticulum | Cell Junction

### GluA1/GluR1 Glutamate Receptor Antibody - Protocols

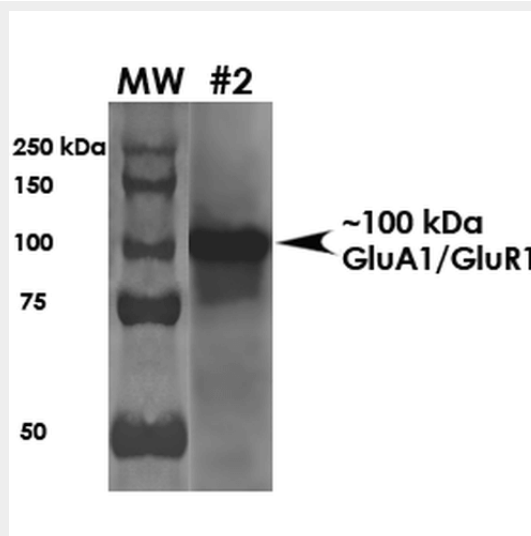
Provided below are standard protocols that you may find useful for product applications.

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

### GluA1/GluR1 Glutamate Receptor Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-GluA1/GluR1 Monoclonal Antibody, Clone N355/1 (ASM10274). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-GluA1/GluR1 Monoclonal Antibody (ASM10274) at 1:200 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) GluA1/GluR1 Antibody (D) Composite.



Western Blot analysis of Rat Brain Membrane showing detection of ~100 kDa GluA1-GluR1 protein using Mouse Anti-GluA1-GluR1 Monoclonal Antibody, Clone N355/1 (ASM10274). Load: 10 µg. Block: 5% milk + TBST. Primary Antibody: Mouse Anti-GluA1-GluR1 Monoclonal Antibody (ASM10274) at 1:2000 for 1 hour at RT. Secondary Antibody: Goat Anti-Mouse HRP at 1:200 for 1 hour at RT. Predicted/Observed Size: ~100 kDa.

### **GluA1/GluR1 Glutamate Receptor Antibody - Background**

Glutamic acid is the major excitatory neurotransmitter in the mammalian central nervous system. Glutamate receptors are classified on the basis of their activation by different agonists (1-3). GluR1, human glutamate receptor type 1, is an integral membrane protein that is widely expressed in the human brain. The postsynaptic actions of glutamic acid are mediated by a variety of receptors that are named according to their selective agonists. GluR1 is known to bind a kainate subtype of agonist. It has been found that malfunctioning of the glutamatergic system may result in certain brain disorders and neurodegeneration (3).

### **GluA1/GluR1 Glutamate Receptor Antibody - References**

1. Potier M.C., Spillantini M.G., Carter N.P. (1992) DNA Seq. 2(4): 211-218.
2. Puckett, C., et al. (1991) Proc. Nat. Acad. Sci. USA 88(17): 7557-7561.
3. Gregor, P., et al. (1993) Proc. Nat. Acad. Sci. USA 90: 3053-3057.