

### GluA1/GluR1 Glutamate Receptor Antibody

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

### **Specification**

# GluA1/GluR1 Glutamate Receptor Antibody - Product Information

Application WB
Primary Accession P19490
Other Accession NP\_113796
Host Mouse
Isotype IgG1

Reactivity Human, Mouse, Rat

Clonality Monoclonal

Format HRP

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, Al853806 Antibody, 2900051M01Rik Antibody, GluRA Antibody, Glr1 Antibody, MGC13325 Antibody, GLUH1 Antibody, GluA1 Antibody, GLUR1 Antibody, GluRA 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** 

 $1~\mu g/ml$  of SMC-440 was sufficient for detection of GluA1/GluR1 in 20  $\mu g$  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



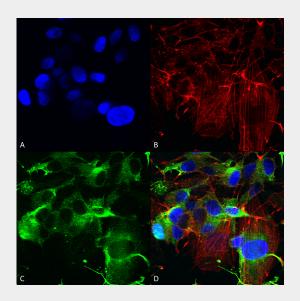


# GluA1/GluR1 Glutamate Receptor Antibody - Protocols

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

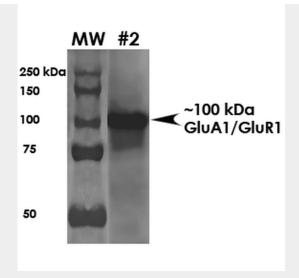
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# 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  $\sim \! 100$  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:  $\sim \! 100$  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.