

Anti- GluA1-GluR1 Catalog# SMC-440D

Size: 100µg

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This product is for *in vitro* research use only and is not intended for use in humans or animals

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Product	Mouse anti-GluA1/GluR1 monoclonal
Clone	S355-1
Immunogen	Fusion protein amino acids 1-389 (extracellular N-terminus) of rat GluA1/GluR1, accession number P19490
Host and Subclass	Mouse monoclonal, IgG ₁
Cited Applications	WB, ICC, IHC
Specificity	Detects ~100kDa. Does not cross-react with GluR2.
Species cross-reactivity	Rat, Mouse
Format	Protein G Purified. In PBS pH7.4, 50% glycerol and 0.09% sodium azide.
Concentration	1mg/mL; 1:1000 WB
Storage and stability	-20 °C; 1 year+; shipped on cold packs or ambient

Selected 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.

Certificate of Analysis

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

Scientific 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).

Material Safety Data Sheet

Anti- GluA1/GluR1 (Monoclonal Antibody) SMC-440

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The below information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. StressMarq shall not be held liable for any damage resulting from handling or from contact with the above product. See the Technical Specification, Packing Slip, Invoice, and Product Catalogue for additional terms and conditions of sale.

Hazardous Ingredients

The physical, chemical and toxicological properties of these components have not been fully investigated. It is recommended that all laboratory personnel follow standard laboratory safety procedures when handling this product. Safety procedures should include wearing OSHA approved safety glasses, gloves and protective clothing. Direct physical contact with this product should be avoided.

<u>Known Hazardous Components</u>	<u>CAS Number</u>	<u>Percent</u>
Sodium Azide	26628-22-8	0.1

Physical Data

This product consists of mouse immunoglobulin in PBS containing 0.1% azide in 50% glycerol, shipped on gel packs. The physical properties of this product have not been investigated thoroughly.

Fire and Explosion Hazard and Reactivity Data

NOT APPLICABLE

Toxicological Properties

May be harmful by inhalation, ingestion, or skin absorption. The toxicological properties of this product have not been investigated thoroughly. Exercise due caution.

Preventative Measures

Wear chemical safety goggles and compatible chemical-resistant gloves. Avoid inhalation, contact with eyes, skin or clothing.

Spill and Leak Procedures

Observe all federal, state and local environmental regulations.

- Wear protective equipment.
- Absorb on sand or vermiculite and place in closed containers for disposal.
- Dispose or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

First Aid Measures

- If swallowed, wash out mouth with water, provided person is conscious. Call a physician.
- In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If a rash or other irritation develops, call a physician.
- If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
- In case of eye contact, flush with copious amounts of water for at least 15 minutes while separating the eyelids with fingers. Call a physician.

Authorized: StressMarq Biosciences Inc.
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