

## Mouse anti-Mouse, rat GluR1 Monoclonal Antibody | anti-GRIA1 antibody

Anti-GluR1

|                              |                      |                                 |                                                           |
|------------------------------|----------------------|---------------------------------|-----------------------------------------------------------|
| CATALOG #<br><b>AAA72752</b> | HOST<br><b>Mouse</b> | REACTIVITY<br><b>Mouse, rat</b> | APPLICATIONS<br><b>Immunohistochemistry, Western Blot</b> |
|------------------------------|----------------------|---------------------------------|-----------------------------------------------------------|

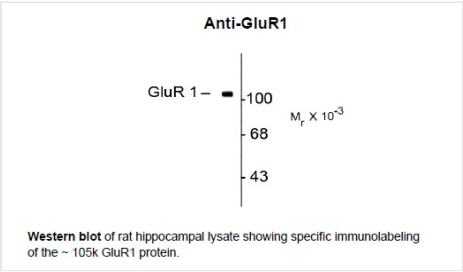
### PRODUCT SYNONYMS

GluR1; Monoclonal Antibody; Anti-GluR1; anti-GRIA1 antibody

### PRODUCT SPECIFICATIONS

|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                            | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Reactivity                                      | Mouse, rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Clonality                                       | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Isotype                                         | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Clone Number                                    | RH95                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Specificity                                     | Specific for the ~100k GluR1 protein in Western blots of rat brain extracts.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Purity/Purification                             | Protein G purified (Protein G purified culture supernatant)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Form/Format                                     | 100 ul in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 ug per ml BSA and 50% glycerol. Adequate amount of material to conduct 10-mini Western Blots.                                                                                                                                                                                                                                                                                                                                                                                                 |
| Sequence Length                                 | 907                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Applicable Applications for anti-GRIA1 antibody | IHC (Immunohistochemistry), WB (Western Blot)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Antigen                                         | Peptide corresponding to amino acid residues from the N-terminal region of rat GluR1.                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Immunogen Information                           | Synthetic peptide corresponding to amino acid residues from the N-terminal region conjugated to KLH                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Immunogen Species                               | Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Species Reactivity Note                         | The antibody has been directly tested for reactivity in Western blots with mouse and rat tissue.                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Biological Significance                         | The ion channels activated by glutamate are typically divided into two classes. Those that are sensitive to N-methyl-D-aspartate (NMDA) are designated NMDA receptors (NMDAR) while those activated by alpha-amino-3-hydroxy-5-methyl-4-isoxalone propionic acid (AMPA) are known as AMPA receptors (AMPA). The AMPAR are comprised of four distinct glutamate receptor subunits designated (GluR1-4) and they play key roles in virtually all excitatory neurotransmission in the brain (Keinänen et al., 1990;Hollmann and Heinemann, 1994). |
| Preparation and Storage                         | For long term storage at -80 degree C is recommended; Short term storage is -20 degree C is also acceptable as aliquots may be taken without freeze/thawing due to the presence of 50% glycerol. Stock solutions are stable for at least one year at -20 degree C.                                                                                                                                                                                                                                                                             |

IMAGES



Application Data

ADDITIONAL INFORMATION

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-GRIA1 antibody | Affinity Purified mouse monoclonal antibody                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| References                                          | <ul style="list-style-type: none"><li>• Chung HJ, Steinberg JP, Huganir RL, Linden DJ (2003) Requirement of AMPA receptor GluR2 phosphorylation for cerebellar long-term depression. Science 300:1751-1755.</li><li>• Hollmann M, Heinemann S (1994) Cloned glutamate receptors. Annu Rev Neurosci 17:31-108.</li><li>• Keinänen K, Wisden W, Sommer B, Werner P, Herb A, Verdoorn TA, Sakmann B, Seeburg PH (1990) A family of AMPA-selective glutamate receptors. Science 249:556-560.</li></ul> |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                                                            |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 29789269                                                                                                                                                                                   |
| NCBI GeneID                      | 50592                                                                                                                                                                                      |
| NCBI Accession #                 | NP_113796.1                                                                                                                                                                                |
| NCBI GenBank Nucleotide #        | NM_031608.1                                                                                                                                                                                |
| UniProt Accession #              | P19490                                                                                                                                                                                     |
| Molecular Weight                 | 100                                                                                                                                                                                        |
| NCBI Official Full Name          | glutamate receptor 1                                                                                                                                                                       |
| NCBI Official Synonym Full Names | glutamate receptor, ionotropic, AMPA 1                                                                                                                                                     |
| NCBI Official Symbol             | Gria1                                                                                                                                                                                      |
| NCBI Official Synonym Symbols    | GluA1; gluR-A                                                                                                                                                                              |
| NCBI Protein Information         | glutamate receptor 1; GluR1; gluR-1; gluR-K1; glutamate receptor A; glutamate receptor subunit GluR1; AMPA-selective glutamate receptor 1; glutamate receptor, ionotropic, AMPA1 (alpha 1) |
| UniProt Protein Name             | Glutamate receptor 1                                                                                                                                                                       |
| UniProt Gene Name                | Gria1                                                                                                                                                                                      |
| UniProt Synonym Gene Names       | Glur1; GluR-1; GluA1                                                                                                                                                                       |
| UniProt Entry Name               | GRIA1_RAT                                                                                                                                                                                  |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.