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# Anti-Phospho-GluR1 (S845) GRIA1 Rabbit Monoclonal Antibody

Catalog # ABO13096

## Product Information

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| **Application** | WB |
| **Primary Accession** | P42261 |
| **Host** | Rabbit |
| **Isotype** | Rabbit IgG |
| **Reactivity** | Rat, Human, Mouse |
| **Clonality** | Monoclonal |
| **Format** | Liquid |
| **Description** | Anti-Phospho-GluR1 (S845) GRIA1 Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human, Mouse, Rat. |

## Additional Information

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| **Gene ID** | 2890 |
| **Other Names** | Glutamate receptor 1, GluR-1, AMPA-selective glutamate receptor 1, GluR-A, Glutamate receptor ionotropic, AMPA 1, GRIA1 (HGNC:4571) |
| **Calculated MW** | 101506 |
| **Application Details** | WB 1:500-1:1000 |
| **Subcellular Localization** | Cell membrane; Multi-pass membrane protein. Endoplasmic reticulum membrane; Multi-pass membrane protein. Cell junction, synapse, postsynaptic cell membrane; Multi-pass membrane protein. Cell junction, synapse, postsynaptic cell membrane, postsynaptic density. Cell projection, dendrite. Cell projection, dendritic spine. Interaction with CACNG2, CNIH2 and CNIH3 promotes cell surface expression. |
| **Tissue Specificity** | Detected in cerebellum (at protein level).. |
| **Source** | Eukaryota |
| **Protein Name** | Glutamate receptor 1 |
| **Contents** | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA. |
| **Clone Names** | Clone: GFH-7 |
| **Immunogen** | A synthesized peptide derived from human GluR1 |
| **Purification** | Affinity-chromatography |

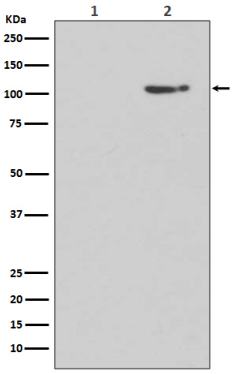
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| **Storage** | Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles. |

## Protein Information

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| **Name** | GRIA1 ( HGNC:4571) |
| **Function** | Ionotropic glutamate receptor that functions as a ligand- gated cation channel, gated by L-glutamate and glutamatergic agonists such as alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA), quisqualic acid, and kainic acid (PubMed:1311100, PubMed:20805473, PubMed:21172611, PubMed:28628100, PubMed:35675825). L- glutamate acts as an excitatory neurotransmitter at many synapses in the central nervous system. Binding of the excitatory neurotransmitter L-glutamate induces a conformation change, leading to the opening of the cation channel, and thereby converts the chemical signal to an electrical impulse upon entry of monovalent and divalent cations such as sodium and calcium. The receptor then desensitizes rapidly and enters in a transient inactive state, characterized by the presence of bound agonist (By similarity). In the presence of CACNG2 or CACNG4 or CACNG7 or CACNG8, shows resensitization which is characterized by a delayed accumulation of current flux upon continued application of L- glutamate (PubMed:21172611). Resensitization is blocked by CNIH2 through interaction with CACNG8 in the CACNG8-containing AMPA receptors complex (PubMed:21172611). Calcium (Ca(2+)) permeability depends on subunits composition and, heteromeric channels containing edited GRIA2 subunit are calcium-impermeable. Also permeable to other divalents cations such as strontium(2+) and magnesium(2+) and monovalent cations such as potassium(1+) and lithium(1+) (By similarity). |
| **Cellular Location** | Cell membrane; Multi-pass membrane protein. Endoplasmic reticulum membrane {ECO:0000250\|UniProtKB:P19490}; Multi-pass membrane protein {ECO:0000250\|UniProtKB:P19490}. Postsynaptic cell membrane; Multi-pass membrane protein. Postsynaptic density membrane {ECO:0000250\|UniProtKB:P23818}; Multi-pass membrane protein {ECO:0000250\|UniProtKB:P23818}. Cell projection, dendrite {ECO:0000250\|UniProtKB:P23818}. Cell projection, dendritic spine {ECO:0000250\|UniProtKB:P23818}. Early endosome membrane {ECO:0000250\|UniProtKB:P19490}; Multi-pass membrane protein {ECO:0000250\|UniProtKB:P19490}. Recycling endosome membrane {ECO:0000250\|UniProtKB:P19490}; Multi-pass membrane protein {ECO:0000250\|UniProtKB:P19490}. Presynapse {ECO:0000250\|UniProtKB:P23818}. Synapse {ECO:0000250\|UniProtKB:P23818} Note=Interaction with CACNG2, CNIH2 and CNIH3 promotes cell surface expression. Colocalizes with PDLIM4 in early endosomes. Displays a somatodendritic localization and is excluded from axons in neurons (By similarity). Localized to cone photoreceptor pedicles (By similarity) {ECO:0000250\|UniProtKB:P19490, ECO:0000250\|UniProtKB:P23818} |
| **Tissue Location** | Widely expressed in brain. |

## Images

Western blot analysis of Phospho-GluR1 (S845) expression in (1) Human brain lysate treated with Lambda phosphatase lysate; (2) Human brain lysate.




Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.