

**Anti-GLUR1 (pS863) Antibody**  
**Rabbit polyclonal antibody to GLUR1 (pS863)**  
**Catalog # AP61257****Specification**

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**Anti-GLUR1 (pS863) Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P42261</a>
Other Accession	<a href="#">P23818</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	101506

**Anti-GLUR1 (pS863) Antibody - Additional Information****Gene ID** 2890**Other Names**

GLUH1; GLUR1; Glutamate receptor 1; GluR-1; AMPA-selective glutamate receptor 1; GluR-A; GluR-K1; Glutamate receptor ionotropic AMPA 1; GluA1

**Target/Specificity**

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human GLUR1 (pS863). The exact sequence is proprietary.

**Dilution**WB~~WB (1/500 - 1/1000), IH (1/50 - 1/200)  
IHC~~1:100~500**Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**Anti-GLUR1 (pS863) Antibody - Protein Information****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: &lt;a href="http://www.uniprot.org/citations/1311100" target="\_blank"&gt;1311100&lt;/a&gt;, PubMed: &lt;a href="http://www.uniprot.org/citations/20805473" target="\_blank"&gt;20805473&lt;/a&gt;, PubMed: &lt;a href="http://www.uniprot.org/citations/21172611" target="\_blank"&gt;21172611&lt;/a&gt;),

PubMed:<a href="http://www.uniprot.org/citations/28628100" target="\_blank">28628100</a>, PubMed:<a href="http://www.uniprot.org/citations/35675825" target="\_blank">35675825</a>). 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:<a href="http://www.uniprot.org/citations/21172611" target="\_blank">21172611</a>). Resensitization is blocked by CNIH2 through interaction with CACNG8 in the CACNG8-containing AMPA receptors complex (PubMed:<a href="http://www.uniprot.org/citations/21172611" target="\_blank">21172611</a>). 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

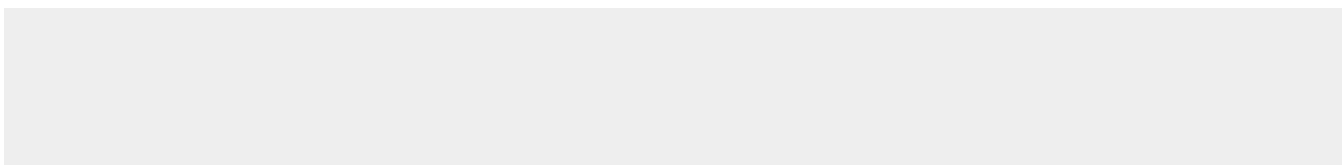
Widely expressed in brain.

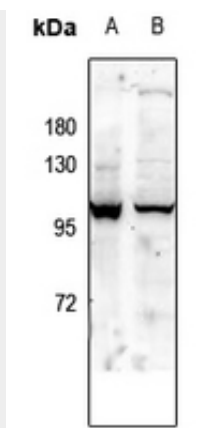
## Anti-GLUR1 (pS863) Antibody - Protocols

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

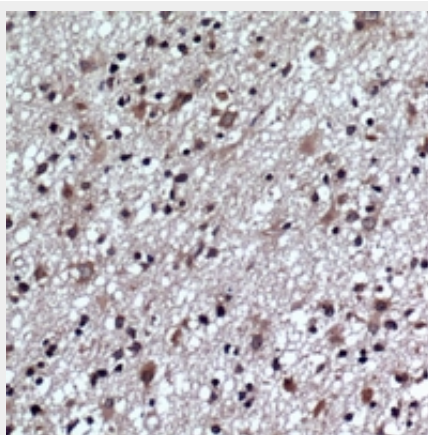
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-GLUR1 (pS863) Antibody - Images





Western blot analysis of GLUR1 (pS863) expression in HCT116 (A), U87MG (B) whole cell lysates.



Immunohistochemical analysis of GLUR1 (pS863) staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

#### **Anti-GLUR1 (pS863) Antibody - Background**

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