

AMPA1 / GLUR1 (aa264-277) Antibody (internal region)
Peptide-affinity purified goat antibody
Catalog # AF3549a**Specification****AMPA1 / GLUR1 (aa264-277) Antibody (internal region) - Product Information**

Application	WB, E
Primary Accession	P42261
Other Accession	NP_000818.2 , NP_001107655.1 , 2890 , 14799 (mouse), 50592 (rat)
Reactivity	Human, Mouse, Rat
Predicted	Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	101506

AMPA1 / GLUR1 (aa264-277) Antibody (internal region) - Additional Information**Gene ID** 2890**Other Names**

Glutamate receptor 1, GluR-1, AMPA-selective glutamate receptor 1, GluR-A, GluR-K1, Glutamate receptor ionotropic, AMPA 1, GluA1, GRIA1, GLUH1, GLUR1

Dilution

WB~~1:1000

E~~N/A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

AMPA1 / GLUR1 (aa264-277) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

AMPA1 / GLUR1 (aa264-277) Antibody (internal region) - 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: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

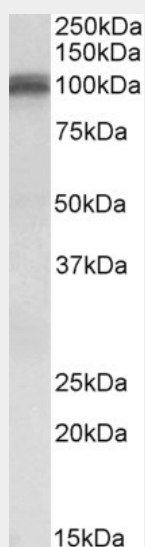
Widely expressed in brain.

AMPA1 / GLUR1 (aa264-277) Antibody (internal region) - 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](#)

AMPA1 / GLUR1 (aa264-277) Antibody (internal region) - Images



AF3549a (0.1 µg/ml) staining of Human Cerebellum lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

AMPA1 / GLUR1 (aa264-277) Antibody (internal region) - Background

This antibody is expected to recognize both reported isoforms (NP_000818.2; NP_001107655.1).

AMPA1 / GLUR1 (aa264-277) Antibody (internal region) - References

Postsynaptic receptor trafficking underlying a form of associative learning. Rumpel S, LeDoux J, Zador A, Malinow R. Science. 2005 Apr 1;308(5718):83-8. PMID: 15746389