

Anti-GLUR2 (pS880) Antibody

Rabbit polyclonal antibody to GLUR2 (pS880) Catalog # AP60299

Specification

Anti-GLUR2 (pS880) Antibody - Product Information

Application WB, IHC
Primary Accession P42262
Other Accession P23819

Reactivity Human, Mouse, Rat, Zebrafish, Monkey,

Host Rabbit Clonality Polyclonal Calculated MW 98821

Anti-GLUR2 (pS880) Antibody - Additional Information

Gene ID 2891

Other Names

GLUR2; Glutamate receptor 2; GluR-2; AMPA-selective glutamate receptor 2; GluR-B; GluR-K2; Glutamate receptor ionotropic, AMPA 2; GluA2

Target/Specificity

Recognizes endogenous levels of GLUR2 (pS880) protein.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 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-GLUR2 (pS880) Antibody - Protein Information

Name GRIA2 (HGNC:4572)

Function

lonotropic 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:20614889, PubMed:31300657, PubMed:8003671).



L-glutamate acts as an excitatory neurotransmitter at many synapses in the central nervous system and plays an important role in fast excitatory synaptic transmission (PubMed:14687553). 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 (PubMed:20614889, PubMed:8003671/a>). 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 CACNG4 or CACNG7 or CACNG8, shows resensitization which is characterized by a delayed accumulation of current flux upon continued application of L-glutamate (By similarity). Through complex formation with NSG1, GRIP1 and STX12 controls the intracellular fate of AMPAR and the endosomal sorting of the GRIA2 subunit toward recycling and membrane targeting (By similarity).

Cellular Location

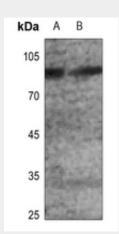
Cell membrane; Multi-pass membrane protein. Postsynaptic cell membrane; Multi-pass membrane protein. Postsynaptic density membrane {ECO:0000250|UniProtKB:P23819}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P23819}. Note=Interaction with CACNG2, CNIH2 and CNIH3 promotes cell surface expression (By similarity). Displays a somatodendritic localization and is excluded from axons in neurons (By similarity). {ECO:0000250|UniProtKB:P19491, ECO:0000250|UniProtKB:P23819}

Anti-GLUR2 (pS880) Antibody - Protocols

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

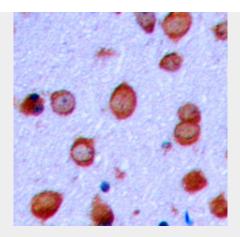
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-GLUR2 (pS880) Antibody - Images



Western blot analysis of GLUR2 (pS880) expression in mouse muscle (A), rat muscle (B) whole cell lysates.





Immunohistochemical analysis of GLUR2 (pS880) 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-GLUR2 (pS880) Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human GLUR2 (pS880). The exact sequence is proprietary.