

Anti-GLURD2 Antibody

Rabbit polyclonal antibody to GLURD2 Catalog # AP60300

Specification

Anti-GLURD2 Antibody - Product Information

Application WB, IF/IC
Primary Accession O43424
Other Accession O61625

Reactivity Human, Mouse, Rat, Zebrafish

Host Rabbit
Clonality Polyclonal
Calculated MW 113356

Anti-GLURD2 Antibody - Additional Information

Gene ID 2895

Other Names

GLURD2; Glutamate receptor ionotropic, delta-2; GluD2; GluR delta-2 subunit

Target/Specificity

Recognizes endogenous levels of GLURD2 protein.

Dilution

WB~~WB (1/500 - 1/1000), IF/IC (1/100 - 1/500) IF/IC~~N/A

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-GLURD2 Antibody - Protein Information

Name GRID2

Synonyms GLURD2

Function

Member of the ionotropic glutamate receptor family, which plays a crucial role in synaptic organization and signal transduction in the central nervous system. Although it shares structural features with ionotropic glutamate receptors, does not bind glutamate as a primary ligand (PubMed:34936451). Promotes synaptogenesis and mediates the D-Serine-dependent long term depression signals and AMPA receptor endocytosis of cerebellar parallel fiber-Purkinje cell (PF-PC) synapses through the





NRX1B-CBLN1-GRID2 triad complex (PubMed:27418511). In the presence of neurexins and cerebellins, forms cation-selective channels that are proposed to be gated by glycine and D-serine (PubMed:34936451). However, recent research disputes this ligand-gated cation channel activity (PubMed:39052831). Cation-selective ion channel activity can be triggered by GRM1 in Purkinje cells (PubMed:24357660, PubMed:27276689).

Cellular Location

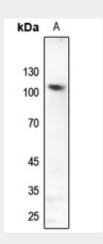
Postsynaptic cell membrane {ECO:0000250|UniProtKB:Q61625}; Multi-pass membrane protein

Anti-GLURD2 Antibody - Protocols

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

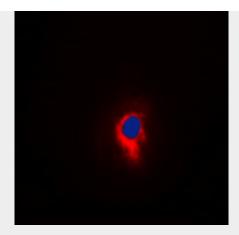
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-GLURD2 Antibody - Images



Western blot analysis of GLURD2 expression in zebrafish (A) whole cell lysates.





Immunofluorescent analysis of GLURD2 staining in HEK293T cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

Anti-GLURD2 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human GLURD2. The exact sequence is proprietary.