

## **Anti-GluR2 Monoclonal Antibody**

**Catalog # ABO14478** 

## **Specification**

# **Anti-GluR2 Monoclonal Antibody - Product Information**

Application WB, IF, ICC, IP

Primary Accession
Host
Rabbit
Isotype
Rabbit IgG

Reactivity Rat, Human, Mouse

Clonality Monoclonal Format Liquid

**Description** 

Anti-GluR2 Monoclonal Antibody . Tested in WB, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.

# **Anti-GluR2 Monoclonal Antibody - Additional Information**

#### **Gene ID 2891**

#### **Other Names**

Glutamate receptor 2, GluR-2, AMPA-selective glutamate receptor 2, GluR-B, GluR-K2, Glutamate receptor ionotropic, AMPA 2, GRIA2 (<a

href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=4572" target=" blank">HGNC:4572</a>)

# **Application Details**

WB 1:500-1:2000<br>ICC/IF 1:50-1:200<br>IP 1:50

### 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.

## **Immunogen**

A synthesized peptide derived from human GluR2 Ionotropic glutamate receptor. 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. The receptor then desensitizes rapidly and enters a transient inactive state, characterized by the presence of bound agonist.

### **Purification**

Affinity-chromatography

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.



# **Anti-GluR2 Monoclonal 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:<a href="http://www.uniprot.org/citations/20614889" target=" blank">20614889</a>, PubMed:<a href="http://www.uniprot.org/citations/31300657" target=" blank">31300657</a>, PubMed:<a href="http://www.uniprot.org/citations/8003671" target=" blank">8003671</a>). 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: <a href="http://www.uniprot.org/citations/14687553" target=" blank">14687553</a>). 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: <a href="http://www.uniprot.org/citations/20614889" target=" blank">20614889</a>, PubMed:<a href="http://www.uniprot.org/citations/8003671" target="blank">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}

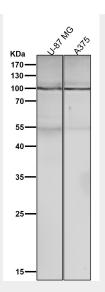
## **Anti-GluR2 Monoclonal Antibody - Protocols**

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

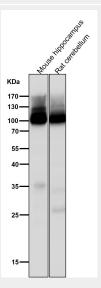
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### Anti-GluR2 Monoclonal Antibody - Images

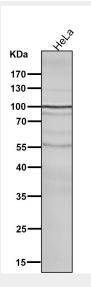




All lanes use the Antibody at 1:5K dilution for 1 hour at room temperature.

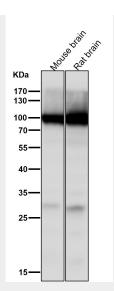


All lanes use the Antibody at 1:5K dilution for 1 hour at room temperature.

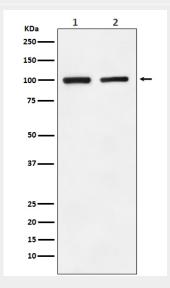


All lanes use the Antibody at 1:5K dilution for 1 hour at room temperature.





All lanes use the Antibody at 1:5K dilution for 1 hour at room temperature.



Western blot analysis of GluR2 expression in (1) Human fetal brain lysate; (2) Mouse brain lysate.