

## Basic Information

<b>Product Name</b>	Anti-Glutamate receptor 2/GRIA2 Antibody	
<b>Gene Name</b>	GRIA2	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, IF, FCM	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human GRIA2 recombinant protein (Position: N25-I360). Human GRIA2 shares 99% amino acid (aa) sequence identity with both mouse and rat GRIA2.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	99 kDa	
<b>Dilution Ratios</b>	Western blot (WB): Immunohistochemistry (IHC): Immunofluorescence (IF): Flow Cytometry (Fixed): (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	1:500-2000 1:50-400 1:50-400 1:50-200

## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

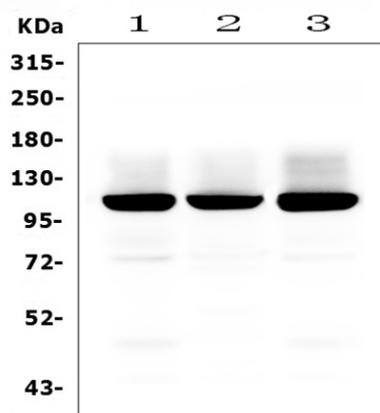
Glutamate receptor 2, also known as GLUR2, is a protein that in humans is encoded by the GRIA2 gene. This gene product belongs to a family of glutamate receptors that are sensitive to alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate (AMPA), and function as ligand-activated cation channels. GLUR2's cytogenetic location is 4q32.1. The crystal structures of the GLUR2 ligand-binding core in the apo state and in the presence of the antagonist DNQX, the partial agonist kainate, and the full agonists AMPA and glutamate. GLUR2 plays a major role in depression at synapses in which glutamate remains in the synaptic cleft for prolonged periods of time during normal operation of the synapse. The

overexpression of GLUR2 increases dendritic spine size and density in hippocampal neurons, and more remarkably, induces spine formation in GABA-releasing interneurons that normally lack spines.

## Reference

Anti-Glutamate receptor 2/GRIA2 Antibody被引用在4文献中。

## Selected Validation Data



Western blot analysis of Glutamate receptor 2/GRIA2 using anti-Glutamate receptor 2/GRIA2 antibody (PB9205). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat brain tissue lysates,

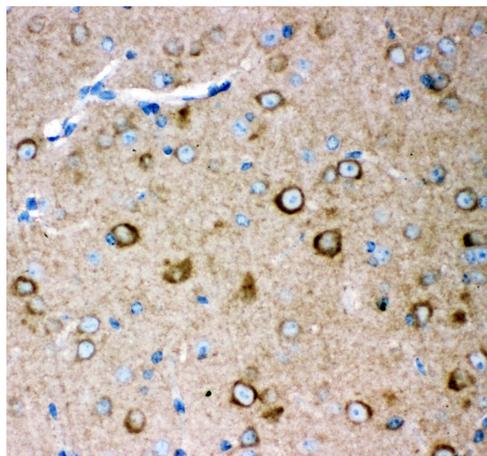
Lane 2: rat C6 whole cell lysates,

Lane 3: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a membrane.

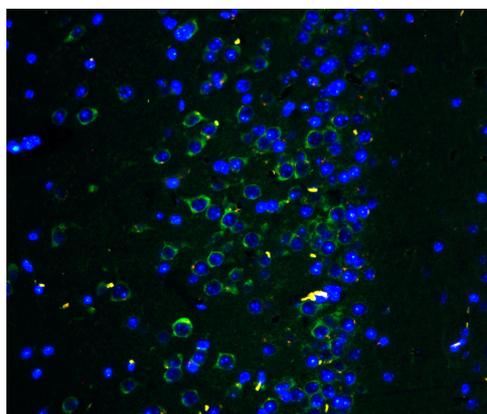
Then the membrane was incubated with rabbit anti-Glutamate receptor 2/GRIA2 antigen affinity purified polyclonal antibody (PB9205) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Glutamate receptor 2/GRIA2 at approximately 99 kDa. The expected band size for Glutamate receptor 2/GRIA2 is at 99 kDa.

Product datasheet  
**Anti-Glutamate receptor 2/GRIA2**  
**Antibody**  
Catalog Number: **PB9205**



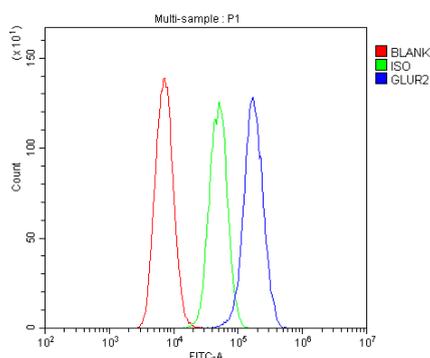
IHC analysis of Glutamate receptor 2/GRIA2 using anti-Glutamate receptor 2/GRIA2 antibody (PB9205).

Glutamate receptor 2/GRIA2 was detected in a paraffin-embedded section of mouse brain tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Glutamate receptor 2/GRIA2 Antibody (PB9205) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of GRIA2 using anti- GRIA2 antibody (PB9205)

GRIA2 was detected in paraffin-embedded section of mouse brain tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution ) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/mL rabbit anti- GRIA2 Antibody (PB9205) overnight at 4°C. Biotin conjugated goat anti-rabbit IgG (BA1003) was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Fluoro488 Conjugated Avidin (BA1128). The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of U87 cells using anti-Glutamate receptor 2/GRIA2 antibody (PB9205).

Overlay histogram showing U87 cells stained with PB9205 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Glutamate receptor 2/GRIA2 Antibody (PB9205) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary

Product datasheet

## Anti-Glutamate receptor 2/GRIA2

### Antibody

**Catalog Number: PB9205**

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Building C21, 3rd to 5th Floors, Optics Valley Biopharmaceutical Accelerator,  
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antibody and secondary antibody (Red line) was used as a blank control.