

## Basic Information

<b>Product Name</b>	Anti-Glutamate receptor 2/GRIA2 Antibody (Clone#ACIB-7)	
<b>Gene Name</b>	GRIA2	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Monoclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat, pig	
<b>Tested Application</b>	WB, IHC, ICC/IF, IP	
<b>Contents</b>	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	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.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Affinity-chromatography	
<b>Observed MW</b>	99 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-200
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-200
	ImmunoPrecipitation (IP):	1:20

## Storage

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

## Background Information

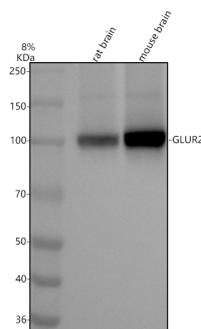
Glutamate receptor 2, also known as GLUR2, is a protein that in humans is encoded by the GRIA2 gene. This gene product belongs to a family of glutamate receptors that are sensitive to alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate (AMPA), and function as ligand-activated cation channels. GLUR2's 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 (Clone#ACIB-7)被引用在2文献中。

## Selected Validation Data



Western blot analysis of anti-GLUR2 antibody (BM5334). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat brain tissue lysates,

Lane 2: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-GLUR2 antigen affinity purified monoclonal antibody (BM5334) 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 GLUR2 at approximately 99 kDa. The expected band size for GLUR2 is at 99 kDa.

Product datasheet

**Anti-Glutamate receptor 2/GRIA2  
Antibody (Clone#ACIB-7)**

**Catalog Number: BM5334**

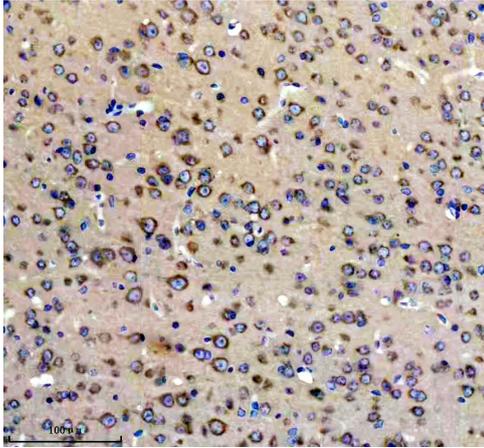
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IHC analysis of GLUR2 using anti-GLUR2 antibody (BM5334).

GLUR2 was detected in a paraffin-embedded section of mouse brain tissue. The tissue section was incubated with rabbit anti-GLUR2 Antibody (BM5334) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.