GLUR1 Antibody / Glutamate Receptor 1 (R31617)

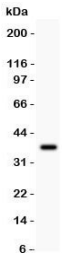
Catalog No.	Formulation	Size
R31617	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

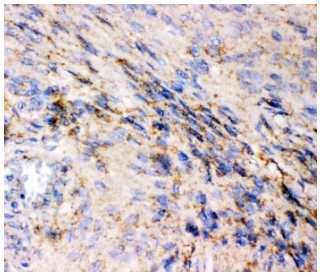
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
Gene ID	2890
Localization	Cytoplasmic
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This GLUR1 antibody is available for research use only.



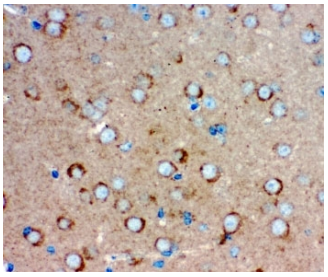
Western blot testing of GLUR1 antibody and Lane 1: rat brain; 2: mouse brain lysate. Predicted molecular weight ~102 kDa.



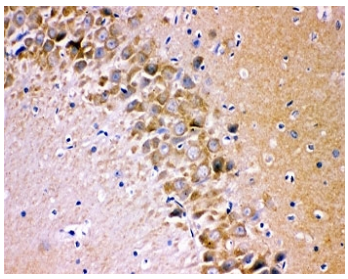
Western blot testing of GLUR1 antibody and recombinant human protein (0.5ng).



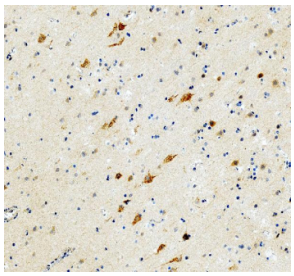
IHC staining of FFPE human meningioma tissue with GLUR1 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



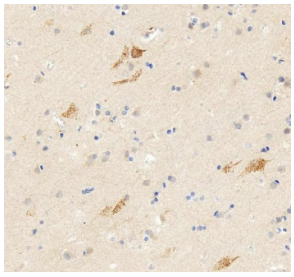
IHC staining of FFPE mouse brain tissue with GLUR1 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE rat brain tissue with GLUR1 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human brain tissue with GLUR1 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human brain tissue with GLUR1 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

GLUR1, also known as Glutamate Receptor 1, is a subunit of AMPA-type glutamate receptors, which mediate fast excitatory neurotransmission in the central nervous system. It plays a critical role in synaptic plasticity, learning, and memory through its involvement in long-term potentiation and long-term depression.

As a ligand-gated ion channel, GLUR1 regulates calcium and sodium influx upon glutamate binding, directly influencing neuronal signaling pathways. Dysregulation of GLUR1 expression or trafficking has been linked to neurological disorders, including epilepsy, schizophrenia, and neurodegenerative diseases.

Researchers frequently utilize a GLUR1 antibody to investigate receptor localization, synaptic changes, and signaling mechanisms. The GLUR1 antibody is also useful in detecting alterations in receptor expression in disease models. NSJ Bioreagents offers a validated GLUR1 antibody to support studies in neuroscience and receptor biology.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the GLUR1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Human partial recombinant protein (AA 19-360) was used as the immunogen for this GLUR1 antibody.

Storage

After reconstitution, the GLUR1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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