

Rabbit GluR2 Polyclonal Antibody | anti-GluR2 antibody

Phospho-GluR2 (Ser880) Antibody

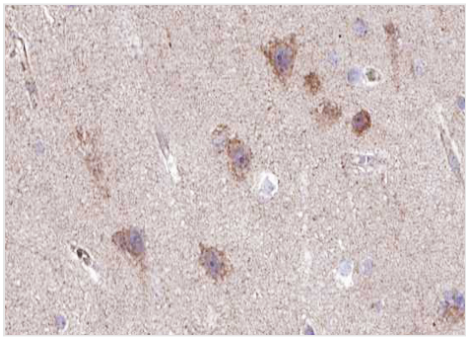
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321620	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

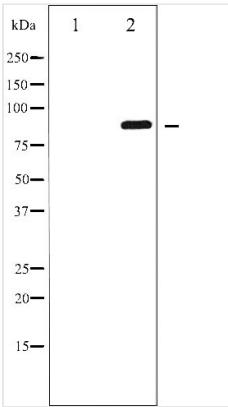
GluR2; Polyclonal Antibody; Phospho-GluR2 (Ser880) Antibody; AMPA 2; AMPA selective glutamate receptor 2; AMPA-selective glutamate receptor 2; AMPA2; GluA2; GLUR 2; GLUR B; GluR K2; GluR-2; GluR-B; GluR-K2; GLUR2; GLURB; Glutamate receptor 2; Glutamate receptor ionotropic AMPA 2; Glutamate receptor ionotropic; Gria2; GRIA2_HUMAN; HBGR2; anti-GluR2 antibody

PRODUCT SPECIFICATIONS

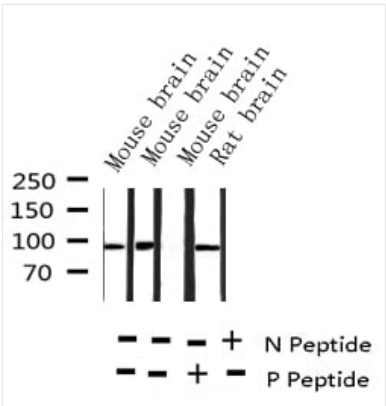
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-GluR2 (Ser880) antibody detects endogenous levels of GluR2 only when phosphorylated at Serine 880
Purity/Purification	From purified rabbit serum by affinity purification via sequential chromatography on phospho-and non-phospho-peptide affinity columns.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	883
Applicable Applications for anti-GluR2 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human GluR2 around the phosphorylation site of Serine 880
Subcellular Location	Cell Membrane. Endoplasmic Reticulum Membrane. Cell Junction > Synapse > Postsynaptic Cell Membrane. Interaction with CACNG2, CNIH2 and CNIH3 promotes cell surface expression.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Chicken, Xenopus
Similarity	Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Chicken (100%), Xenopus (100%)
Conjugation	Unconjugated
Epitope	Phospho Ser880
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA321620 at 1/100 staining human brain tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of GluR2 phosphorylation expression in Mouse brain tissue lysates, The lane on the left is treated with the antigen-specific peptide.



WB (Western Blot)
Western blot analysis of Phospho-GluR2 (Ser880) expression in various lysates

ADDITIONAL INFORMATION

Related Product Information for anti-GluR2 antibody	Description: GluR2 an integral membrane protein belonging to the glutamate-gated ion channel family. L-glutamate (Glu) acts as an excitatory neurotransmitter at many synapses in the central nervous system. Glutamate receptors are heteromeric protein complexes with multiple subunits, each possessing transmembrane regions, and all arranged to form a ligand-gated ion channel. The postsynaptic actions of Glu are mediated by a variety of receptors that are named according to their selective agonists. Function: Receptor for glutamate that functions as ligand-gated ion channel in the central nervous system and plays an important role in excitatory synaptic transmission. 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. 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 glutamate. 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). Subunit Structure: Homotetramer or heterotetramer of pore-forming glutamate receptor subunits. Tetramers may be formed by the dimerization of dimers. May interact with MPP4. Forms a ternary complex with GRIP1 and CSPG4. Interacts with ATAD1 in an ATP-dependent manner. ATAD1-catalyzed ATP hydrolysis disrupts binding to ATAD1 and to GRIP1 and leads to AMPAR complex disassembly. Interacts with GRIP2. Isoform 1, but not isoform 3, interacts with PICK1/PRKCABP. Interacts with GRIA1 and SYNDIG1. Interacts with LRFN1 (By similarity). Found in a complex with GRIA1, GRIA3, GRIA4, CNIH2, CNIH3, CACNG2, CACNG3, CACNG4, CACNG5, CACNG7 and CACNG8. Interacts with CACNG5 (By similarity). Interacts with SNX27 (via PDZ domain); the interaction is required for recycling to the plasma membrane when endocytosed and prevent degradation in lysosomes. Interacts with OLFM2 (By similarity). Interacts with AP4B1, AP4E1 and AP4M1; probably indirect it mediates the somatodendritic localization of GRIA2 in neurons (By similarity). Forms a complex 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). Post-translational Modifications: Palmitoylated. Depalmitoylated upon glutamate stimulation. Cys-610 palmitoylation leads to Golgi retention and decreased cell surface expression. In contrast, Cys-836 palmitoylation does not affect cell surface expression but regulates stimulation-dependent endocytosis (By similarity). Similarity: The M4 transmembrane segment mediates tetramerization and is required for cell surface expression. Belongs to the glutamate-gated ion channel (TC 1.A.10.1) family. GRIA2 subfamily.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	74275354
NCBI GeneID	2891
NCBI Accession #	NP_000817.2
NCBI GenBank Nucleotide #	NM_000826.3
UniProt Accession #	P42262; Q96FP6; A8MT92; I6L997
Molecular Weight	Observed: 99 kDa Predicted: 99 kDa
NCBI Official Full Name	glutamate receptor 2 isoform 1
NCBI Official Synonym Full Names	glutamate ionotropic receptor AMPA type subunit 2
NCBI Official Symbol	GRIA2
NCBI Official Synonym Symbols	GLUR2; GLURB; GluA2; HBGR2; GluR-K2
NCBI Protein Information	glutamate receptor 2
UniProt Protein Name	Glutamate receptor 2
UniProt Gene Name	GRIA2
UniProt Synonym Gene Names	GLUR2; GluR-2; GluA2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/glur2-antibody-immunohistochemistry-western-blot-elisa/321620>