

Product Name: GluR-5 Rabbit Polyclonal Antibody
Catalog #: APRab11495



Summary

Production Name	GluR-5 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	GRIK1
Alternative Names	GRIK1; GLUR5; Glutamate receptor; ionotropic kainate 1; Excitatory amino acid receptor 3; EAA3; Glutamate receptor 5; GluR-5; GluR5
Gene ID	2897.0
SwissProt ID	P39086.The antiserum was produced against synthesized peptide derived from human GluR5. AA range:10-59

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000..
Molecular Weight	100kD

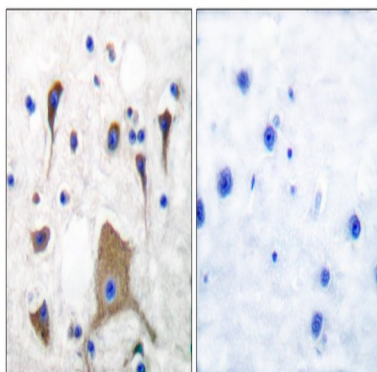
Background

Glutamate receptors are the predominant excitatory neurotransmitter receptors in the mammalian brain and are activated in a variety of normal neurophysiologic processes. This gene product belongs to the kainate family of glutamate receptors, which are composed of four subunits and function as ligand-activated ion channels. The subunit encoded by this gene is subject to RNA editing (CAG->CGG; Q->R) within the second transmembrane domain, which is thought to alter the properties of ion flow. Alternative splicing, resulting in transcript variants encoding different isoforms, has been noted for this gene. [provided by RefSeq, Jul 2008], alternative products: Additional isoforms seem to exist, function: 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. May be involved in the transmission of light information from the retina to the hypothalamus., miscellaneous: The postsynaptic actions of Glu are mediated by a variety of receptors that are named according to their selective agonists. This receptor binds domoate > kainate > L-glutamate = quisqualate > CNQX = DNQX > AMPA > dihydrokainate > NMDA., RNA editing: Partially edited., similarity: Belongs to the glutamate-gated ion channel (TC 1.A.10) family., subunit: Homotetramer or heterotetramer of pore-forming glutamate receptor subunits. Tetramers may be formed by the dimerization of dimers (Probable). The unedited version (Q) assembles into a functional kainate-gated homomeric channel, whereas the edited version (R) is unable to produce channel activity when expressed alone. Both edited and unedited versions can form functional channels with GRIK4 and GRIK5., tissue specificity: Most abundant in the cerebellum and the suprachiasmatic nuclei (SCN) of the hypothalamus.,

Research Area

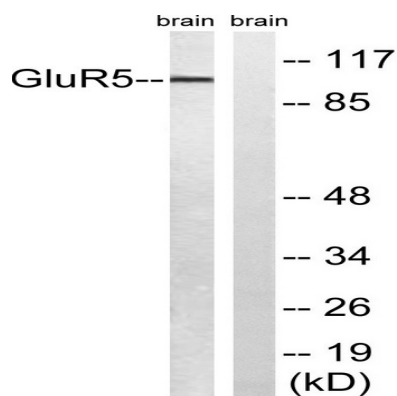
Neuroactive ligand-receptor interaction;

Image Data



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using GluR5 Antibody. The picture on the right is blocked with the synthesized peptide.

Product Name: GluR-5 Rabbit Polyclonal Antibody
Catalog #: APRab11495



Western blot analysis of lysates from mouse brain, using GluR5 Antibody. The lane on the right is blocked with the synthesized peptide.

Note

For research use only.