



Rabbit Anti-GLUR4 antibody

SL12009R

Product Name GLUR4

Chinese Name 离子型谷氨酸受体 4 抗体

Alias Ionotropic Glutamate receptor 4; AMPA 4; AMPA selective glutamate receptor 4; AMPA-selective receptor 4; AMPA4; GluA 4; GluA4; GluR 4; GluR D; GluR-4; GluR-D; GLUR4C; GLURD; GRIA4; GRIA4 receptor 4; Glutamate receptor ionotropic AMPA 4; Glutamate receptor ionotropic; GRIA 4; GRIA4_HUMAN.

Research Area Neurobiology Signal transduction Channel protein The cell membrane 受体 G protein-coupled protein signal

Immunogen Species Rabbit

Clonality Polyclonal

React Species (predicted: Human, Mouse, Rat, Chicken, Dog, Cow, Horse, Rabbit, Sheep,)

Applications WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 98kDa

Cellular localization The cell membrane Extracellular matrix

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human GluA4/Ionotropic Glutamate receptor 4:

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed

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Glutamate receptors are the predominant excitatory neurotransmitter receptors in the mammalian brain, and are activated in a variety of normal neurophysiologic processes. These receptors are heteromeric proteins composed of multiple subunits, arranged to form ligand-gated ion channels. The classification of glutamate receptors is based on their activation by different pharmacologic agonists. The subunit encoded by this gene belongs to a family of AMPA (alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate)-sensitive ionotropic glutamate receptors, and is subject to RNA editing (AGA->GGA; R->G). Alternative splicing of this gene produces several transcript variants encoding different isoforms, which may vary in their signal transduction properties. Some haplotypes of this gene show a positive association with schizophrenia. [provided by RefSeq, Jun 2015]

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 conformational change that leads 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 a bound agonist.

Subunit:

Homotetramer or heterotetramer of pore-forming glutamate receptor subunits. Tetramers may be formed by the dimerization of dimers. Interacts with EPB41L1 via its C-terminus (By similarity). Found in a complex with GRIA1, GRIA2, GRIA3, CNIH2, CNIH3, CACNG2, CACNG3, CACNG4, CACNG5, CACNG6, CACNG7, and CACNG8. Interacts with CACNG5 and PRKCG.

Product Detail

Subcellular Location:

Cell membrane; Multi-pass membrane protein. Cell junction, synapse, postsynaptic cell membrane, presynaptic cell membrane protein. Cell projection, dendrite. Note=Interaction with CNIH2, CNIH3 and PRKCG. Cell surface expression

Post-translational modifications:

Palmitoylated. Depalmitoylated upon glutamate stimulation. Cys-611 palmitoylation leads to Golgi retention and decreased cell surface expression. In contrast, Cys-837 palmitoylation does not affect cell surface expression but regulates stimulation-dependent endocytosis.

Similarity:

Belongs to the glutamate-gated ion channel (TC 1.A.10.1) family. GRIA4 subfamily.

SWISS:

P48058

Gene ID:

2893

Database links:



[Entrez Gene: 2893](#) Human

[Entrez Gene: 14802](#) Mouse

[Entrez Gene: 29629](#) Rat

[Omim: 138246](#) Human

[SwissProt: P48058](#) Human

[SwissProt: Q9Z2W8](#) Mouse

[SwissProt: P19493](#) Rat

[Unigene: 503743](#) Human

[Unigene: 209263](#) Mouse

[Unigene: 10938](#) Rat