



Rabbit Anti-phospho-GLUR4 (Ser862) antibody

SL12010R

Product Name:	phospho-GLUR4 (Ser862)
Chinese Name:	磷酸化离子型谷氨酸受体4抗体
Alias:	Ionotropic Glutamate receptor 4 (phospho S862); AMPA 4; AMPA selective glutamate receptor 4; AMPA-selective glutamate receptor 4; AMPA4; GluA 4; GluA4; GluR 4; GluR D; GluR-4; GluR-D; GLUR4C; GLURD; Glutamate receptor 4; Glutamate receptor ionotropic AMPA 4; Glutamate receptor ionotropic; GRIA 4; GRIA4; GRIA4 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	98kDa
Cellular localization:	The cell membrane Extracellular matrix
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human GluA4 around the phosphorylation site of Ser862:RL(p-S)IT
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Glutamate receptors mediate most excitatory neurotransmission in the brain and play an

important role in neural plasticity, neural development and neurodegeneration. Ionotropic glutamate receptors are categorized into NMDA receptors and kainate/AMPA receptors, both of which contain glutamate-gated, cation-specific ion channels. Kainate/AMPA receptors are co-localized with NMDA receptors in many synapses and consist of seven structurally related subunits designated GluR-1 to -7. The kainate/AMPA receptors are primarily responsible for the fast excitatory neurotransmission by glutamate, whereas the NMDA receptors are functionally characterized by a slow kinetic and a high permeability for Ca²⁺ ions. The NMDA receptors consist of five subunits: epsilon 1, 2, 3, 4 and one zeta subunit. The zeta subunit is expressed throughout the brainstem, whereas the four epsilon subunits display limited distribution.

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.

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, CACNG7 and CACNG8. Interacts with CACNG5 and PRKCG

Subcellular Location:

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

Important Note:

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

www.sungbiotech.com