

GLUR4 (pS862) Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP51646

Product Information

Application	WB
Primary Accession	P48058
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	100871

Additional Information

Gene ID	2893
Other Names	Glutamate receptor 4, GluR-4, GluR4, AMPA-selective glutamate receptor 4, GluR-D, Glutamate receptor ionotropic, AMPA 4, GluA4, GRIA4, GLUR4
Dilution	WB~~1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	GRIA4 {ECO:0000303 PubMed:29220673, ECO:0000312 HGNC:HGNC:4574}
Function	<p>Ionotropic glutamate receptor that functions as a ligand- gated cation channel, gated by L-glutamate and glutamatergic agonists such as alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA), quisqualic acid, and kainic acid (By similarity). L-glutamate acts as an excitatory neurotransmitter at many synapses in the central nervous system and plays an important role in fast excitatory synaptic transmission (By similarity). 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 upon entry of monovalent and divalent cations such as sodium and calcium. The receptor then desensitizes rapidly and enters a transient inactive state, characterized by the presence of bound agonist (By similarity). In the presence of CACNG8, shows resensitization which is characterized by a delayed accumulation of current flux upon continued application of L-glutamate (PubMed:21172611).</p>
Cellular Location	Cell membrane {ECO:0000250 UniProtKB:P19493}; Multi-pass membrane protein {ECO:0000250 UniProtKB:P19493} Postsynaptic cell membrane {ECO:0000250 UniProtKB:P19493}; Multi-pass membrane protein

{ECO:0000250|UniProtKB:P19493}. Cell projection, dendrite
{ECO:0000250|UniProtKB:P19493}. Postsynaptic cell membrane
{ECO:0000250|UniProtKB:P42262}; Multi-pass membrane protein
{ECO:0000250|UniProtKB:P42262}

Background

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.

References

Fletcher E.J.,et al.Recept. Channels 3:21-31(1995).
Taylor T.D.,et al.Nature 440:497-500(2006).
Kato A.S.,et al.Neuron 68:1082-1096(2010).

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