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Rabbit Anti-phospho-GluR1 (Ser849)/Cy5 Conjugated antibody

SL8446R-Cy5

Product Name	Anti-phospho-GluR1 (Ser849)/Cy5
Chinese Name	Cy5 标记的磷酸化谷氨酸受体 1 抗体
Alias	GluR1 (phospho Ser849); GluR1 (phospho S849); p- GluR1(Ser849); p-GluR1(S849); GLUR 1; GLUR A; AMPA 1; AMPA selective glutamate receptor 1; GLUH 1; GLUH1; GluR K1; GluR-1; GluR-A; GluR-K1; GLUR1; GLURA ; GluRK1; Glutamate receptor 1; Glutamate receptor ionotropic AMPA 1; Gria 1; Gria1 ; Gria1; HBGR1; MGC133252.
Product Type	Phosphorylated anti
Research Area	Tumour Cell biology immunology Neurobiology Signal transduction Apoptosis transcriptional regulatory factor
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Mouse,Rat(predicted:Chicken,Dog,Pig,Cow,Horse,Sheep)
Applications	IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	98kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthesised phosphopeptide derived from human GluR1 around the phosphorylation site of Ser849 [QQ(p-S)IN]
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% 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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Product Detail

background:
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 protein complexes with multiple subunits, each possessing transmembrane regions, and all arranged to form a ligand-gated ion channel. The classification of glutamate receptors is based on their activation by different pharmacologic agonists. This gene belongs to a family of alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate (AMPA) receptors. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008].

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. 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.

Subunit:
Homotetramer or heterotetramer of pore-forming glutamate receptor subunits. Tetramers may be formed by the dimerization of dimers. Interacts with DLG1 via its C-terminus. Interacts with SYNDIG1 and GRIA2. Interacts with LRFN. Interacts with HIP1 and RASGRF2. Found in a complex with GRIA2, GRIA3, GRIA4, CNIH2, CNIH3, CACNG2, CACNG3, CACNG4, CACNG5, CACNG7 and CACNG8. Interacts with CACNG5. Interacts with CNIH2 and CACNG2.

Subcellular Location:
Cell membrane; Multi-pass membrane protein. Endoplasmic reticulum membrane; Multi-pass membrane protein. Cell junction, synapse, postsynaptic cell membrane; Multi-pass membrane protein. Cell junction, synapse, postsynaptic cell membrane, postsynaptic density. Cell projection, dendrit. Cell projection, dendritic spine. Note=Interaction with CACNG2, CNIH2 and CNIH3 promotes cell surface expression.

Tissue Specificity:
Widely expressed in brain.

Post-translational modifications:

Palmitoylated. Depalmitoylated upon glutamate stimulation. Cys-603 palmitoylation leads to Golgi retention and decreased cell surface expression. In contrast, Cys-829 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. GRIA1 subfamily.

Database links:

Entrez Gene: 2890 Human

Entrez Gene: 14799 Mouse

Entrez Gene: 50592 Rat

Omim: 138248 Human

SwissProt: P42261 Human

SwissProt: P23818 Mouse

SwissProt: P19490 Rat

Unigene: 519693 Human

Unigene: 4920 Mouse

Unigene: 29971 Rat

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

NMDAR1 又称 GluR1 (Glutamate Receptor 1)近年实验研究发现，许多 NMDAR 拮抗药均具有镇痛活性，表明 NMDAR 在痛觉传递中具有重要作用，这为新型镇痛药的研究开发提供了新的作用靶点。