

Goat Anti-GRIK3 / GLUR7 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1511a**Specification**

Goat Anti-GRIK3 / GLUR7 Antibody - Product Information

Application	WB
Primary Accession	Q13003
Other Accession	NP_000822 , 2899 , 14807 (mouse) , 298521 (rat)
Reactivity	Mouse, Rat
Predicted	Human, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	104037

Goat Anti-GRIK3 / GLUR7 Antibody - Additional Information**Gene ID** 2899**Other Names**

Glutamate receptor ionotropic, kainate 3, GluK3, Excitatory amino acid receptor 5, EAA5, Glutamate receptor 7, GluR-7, GluR7, GRIK3, GLUR7

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-GRIK3 / GLUR7 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-GRIK3 / GLUR7 Antibody - Protein Information**Name** GRIK3**Synonyms** GLUR7**Function**

Ionotropic glutamate receptor that functions as a cation- permeable ligand-gated ion channel, gated by L-glutamate and the glutamatergic agonist kainic acid. 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 (PubMed:7719709). In association with GRIK2, involved in presynaptic facilitation of glutamate release at hippocampal mossy fiber synapses (By similarity).

Cellular Location

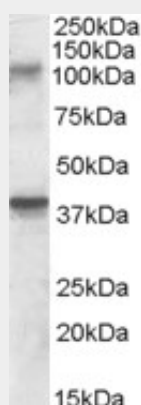
Cell membrane {ECO:0000250|UniProtKB:P42264}; Multi-pass membrane protein. Postsynaptic cell membrane {ECO:0000250|UniProtKB:P42264}; Multi-pass membrane protein

Goat Anti-GRIK3 / GLUR7 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Goat Anti-GRIK3 / GLUR7 Antibody - Images



AF1511a(0.3 µg/ml) staining of Rat Brain lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-GRIK3 / GLUR7 Antibody - 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. It is not certain if the subunit encoded by this gene is subject to RNA editing as the other 2 family members (GRIK1 and GRIK2). A Ser310Ala polymorphism has been associated with schizophrenia, and there are conflicting reports of its association with the pathogenesis of delirium tremens in alcoholics.

Goat Anti-GRIK3 / GLUR7 Antibody - References

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success

genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.

Are GRIK3 (T928G) gene variants in schizophrenia patients different from those in their first-degree relatives? Kilic G, et al. Psychiatry Res, 2010 Jan 30. PMID 19995671.

Association between the ionotropic glutamate receptor kainate3 (GRIK3) Ser310Ala polymorphism and schizophrenia in the Indian population. Ahmad Y, et al. World J Biol Psychiatry, 2009. PMID 19921975.

Glutamate binding and conformational flexibility of ligand-binding domains are critical early determinants of efficient kainate receptor biogenesis. Gill MB, et al. J Biol Chem, 2009 May 22. PMID 19342380.

Association of markers in the 3' region of the GluR5 kainate receptor subunit gene to alcohol dependence. Kranzler HR, et al. Alcohol Clin Exp Res, 2009 May. PMID 19320626.