

### Goat Anti-GLuR5 / GRIK1 Antibody

Peptide-affinity purified goat antibody Catalog # AF1483a

### **Specification**

# **Goat Anti-GLuR5 / GRIK1 Antibody - Product Information**

Application WB
Primary Accession P39086

Other Accession NP 783300, 2897, 14805 (mouse), 29559 (rat)

Reactivity
Predicted
Host
Clonality
Concentration
Human
Mouse, Rat
Goat
Polyclonal
100ug/200ul

Isotype IgG
Calculated MW 103981

## Goat Anti-GLuR5 / GRIK1 Antibody - Additional Information

### **Gene ID 2897**

### **Other Names**

Glutamate receptor ionotropic, kainate 1, GluK1, Excitatory amino acid receptor 3, EAA3, Glutamate receptor 5, GluR-5, GluR5, GRIK1, GLUR5

#### **Format**

0.5~mg lgG/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-GLuR5 / GRIK1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Goat Anti-GLuR5 / GRIK1 Antibody - Protein Information

### Name GRIK1

## **Synonyms** GLUR5

# **Function**

lonotropic 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. May be involved in the transmission of light information from the retina to the hypothalamus.

#### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Postsynaptic cell membrane; Multi-pass membrane protein

#### **Tissue Location**

Most abundant in the cerebellum and the suprachiasmatic nuclei (SCN) of the hypothalamus

# Goat Anti-GLuR5 / GRIK1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## Goat Anti-GLuR5 / GRIK1 Antibody - Images

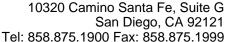


AF1483a (1  $\mu$ g/ml) staining of Human Brain (Cerebellum) lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

# Goat Anti-GLuR5 / GRIK1 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. The subunit encoded by this gene is subject to RNA editing (CAG->CGG; Q->R) within the second transmembrane domain, which is thought to alter the properties of ion flow. Alternative splicing, resulting in transcript variants encoding different isoforms, has been noted for this gene.

### Goat Anti-GLuR5 / GRIK1 Antibody - References





Generalist genes analysis of DNA markers associated with mathematical ability and disability reveals shared influence across ages and abilities. Docherty SJ, et al. BMC Genet, 2010 Jul 5. PMID 20602751.

A Large-scale genetic association study of esophageal adenocarcinoma risk. Liu CY, et al. Carcinogenesis, 2010 Jul. PMID 20453000.

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.

Human variation in alcohol response is influenced by variation in neuronal signaling genes. Joslyn G, et al. Alcohol Clin Exp Res, 2010 May. PMID 20201926.

Aberrant glutamate receptor 5 expression in temporal lobe epilepsy lesions. Li JM, et al. Brain Res, 2010 Jan 22. PMID 19941835.