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Grik5 Antibody
Catalog # ASC10612

Specification

Grik5 Antibody - Product Information

Application	**WB, IHC, IF**
Primary Accession	Q16478
Other Accession	NP_002079, 29029597
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**Grik5 antibody can be used for detection of Grik5 by Western blot at 0.5 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.**

Grik5 Antibody - Additional Information

Gene ID **2901**

Target/Specificity
GRIK5; This Grik5 antibody does not cross-react with Grik4.

Reconstitution & Storage
Grik5 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
Grik5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Grik5 Antibody - Protein Information

Name GRIK5

Synonyms GRIK2

Function
Receptor for glutamate. L-glutamate acts as an excitatory neurotransmitter at many synapses in the central nervous system. The postsynaptic actions of Glu are mediated by a variety of receptors that are named according to their selective agonists. This receptor binds kainate > quisqualate > domoate > L-glutamate >> AMPA >> NMDA = 1S,3R- ACPD.

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

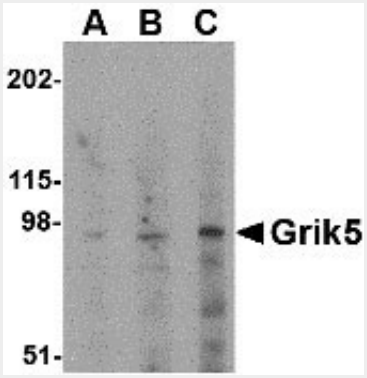
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Grik5 Antibody - Protocols

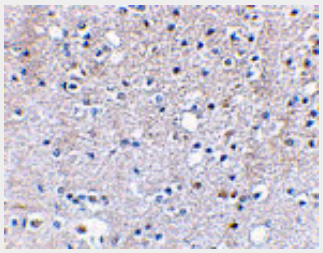
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

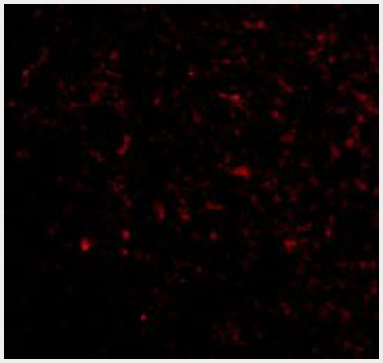
Grik5 Antibody - Images



Western blot analysis of Grik5 in human brain tissue lysate with Grik5 antibody at (A) 0.5, (B) 1 and (C) 2 µg/mL.



Immunohistochemical staining of human brain tissue using Grik5 antibody at 2.5 µg/mL.



Immunofluorescence of Grik5 in Human Brain cells with Grik5 antibody at 20 µg/mL.

Grik5 Antibody - Background

Grik5 Antibody: Glutamate receptors are the predominant excitatory neurotransmitter receptors in the mammalian brain and are activated in a variety of normal neurophysiologic processes. Grik5, also known as kainate-preferring glutamate recptor subunit KA2, belongs to the kainate family of glutamate receptors, which are composed of four subunits and function as ligand-activated ion channels. Grik5 is highly homologous to the related ionotrophic glutamate receptor Grik4 (also known as KA1). Like Grik4, Grik5 does not form homomeric channels, but instead forms heteromers with Grik2. In Grik2- but not Grik1-null mice, Grik5 surface expression is greatly reduced in neurons, indicating that Grik2/Grik5 heteromers are required for exit from the endoplasmic reticulum to the cell surface.

Grik5 Antibody - References

Tanaka K. Functions of glutamate transports in the brain. Neurosci. Res.2000; 37:15-9.
Herb A, Burnashev N, Werner P, et al. The KA-2 subunit of excitatory amino acid receptors shows widespread expression in brain and forms ion channels with distantly related subunits. Neuron1992; 8:775-85.
Pinheiro P and Mulle C. Kainate receptors. Cell Tissue Res.2006; 326:457-82.
Nasu-Nishimura Y, Hurtado D, Braud S, et al. Tification of an endoplasmic reticulum-retention motif in an intracellular loop of the kainate receptor subunit KA2. J. Neurosci.2006; 26:7014-21.