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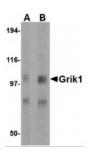
HIGH PERFORMANCE ANTIBODIES ... AND MORE

ProSci Incorporated 12170 Flint Place Poway, CA 92064 Toll Free: +1 (888) 513 9525 Local: +1 (858) 513 2638 Fax: +1 (858) 513 2692

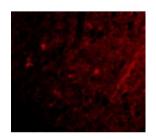
techsupport@prosci-inc.com

Grik1 Antibody

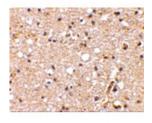
CATALOG NUMBER: 4383



Western blot analysis of Grik1 in rat brain tissue lysate with Grik1 antibody at (A) 0.5 and (B) 1 μ



Immunofluorescence of Grik1 in Human Brain cells with Grik1 antibody at 20 ug/mL.



Immunohistochemical staining of human brain tissue using Grik1 antibody at 2.5 ug/mL.

Specifications	
SPECIES REACTIVITY:	Human, Mouse, Rat
TESTED APPLICATIONS:	ELISA, IF, IHC-P, WB
APPLICATIONS:	Grik1 antibody can be used for detection of Grik1 by Western blot at 0.5 - 1 ug/mL. Antibody can also be used for immunohistochemistry starting at 2.5 ug/mL. For immunofluorescence start at 20 ug/mL.
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
POSITIVE CONTROL:	1) Cat. No. 1463 - Rat Brain Tissue Lysate
IMMUNOGEN:	Grik1 antibody was raised against a 16 amino acid synthetic peptide near the center of the human Grik1.
	The immunogen is located within amino acids 380 - 430 of Grik1.
HOST SPECIES:	Rabbit
Duamantias	
Properties	
PURIFICATION:	Grik1 Antibody is affinity chromatography purified via peptide column.
PHYSICAL STATE:	Liquid
BUFFER:	Grik1 Antibody is supplied in PBS containing 0.02% sodium azide.
CONCENTRATION:	1 mg/mL
STORAGE CONDITIONS:	Grik1 antibody can be stored at 4°C for three months and -20°C, 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.
CLONALITY:	Polyclonal
ISOTYPE:	lgG
CONJUGATE:	Unconjugated
Additional Info	
ALTERNATE NAMES:	Grik1 Antibody: EAA3, EEA3, GLR5, GLUR5, GluK1, Glutamate receptor ionotropic, kainate 1, Excitatory amino acid receptor 3
ACCESSION NO.:	P39086

PROTEIN GI NO.:	729597
OFFICIAL SYMBOL:	GRIK1
GENE ID:	2897
Background	
BACKGROUND:	Grik1 Antibody: Glutamate receptors are the predominant excitatory neurotransmitter receptors in the mammalian brain and are activated in a variety of normal neurophysiologic processes. Grik1, also known as glutamate receptor 5, belongs to the kainate family of glutamate receptors, which are composed of four subunits and function as ligand-activated ion channels. Grik1 is expressed in GABAergic interneurons of the hippocampus and are thought to participate in the formation of various subtypes of kainate receptors with Grik2 and KA2. Stimulation of Grik1 leads to intracellular calcium release and activation of protein kinase C. Excessive activation has been associated with psychiatric, neurological and neurodegenerative diseases. Numerous isoforms of Grik1 are known to exist and may be subject to RNA editing within the second transmembrane domain, which is thought to alter the properties of ion flow.
REFERENCES:	1) Tanaka K. Functions of glutamate transports in the brain. Neurosci. Res.2000; 37:15-9.
	2) Pinheiro P and Mulle C. Kainate receptors. Cell Tissue Res.2006; 326:457-82.
	3) Bureau I, Dieudonne S, Coussen F, et al. Kainate receptor-mediated responses in the CA1 field of wild-type and GluR6-deficient mice. J. Neurosci.1999; 19:653-63.
	4) Christensen JK, Paternain AV, Selak S, et al. A mosaic of functional kainate receptors in hippocampal interneurons. J. Neurosci.2004; 24:8986-93.

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December 13, 2016