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Datasheet for 600-401-BN4

GRIK1 Antibody

Overview

Description:	Anti-GRIK1 (RABBIT) Antibody - 600-401-BN4
Item No.:	600-401-BN4
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	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.
Synonyms:	Grik1 Antibody, EAA3, EEA3, GLR5, GLUR5, GluK1, Glutamate receptor ionotropic, kainate 1, Excitatory amino acid receptor 3
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	GRIK1
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-Grik1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid synthetic peptide near the C-terminus of the human Grik1.
Purity/Specificity:	Anti-Grik1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with Grik1 from other sources has not been determined.
Relevant Links:	• UniProtKB - P39086 • GeneID - 2897 • NCBI - NP_000821.1

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-Grik1 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 104 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5000 - 1:20,000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	0.5-2 µg/mL

Formulation

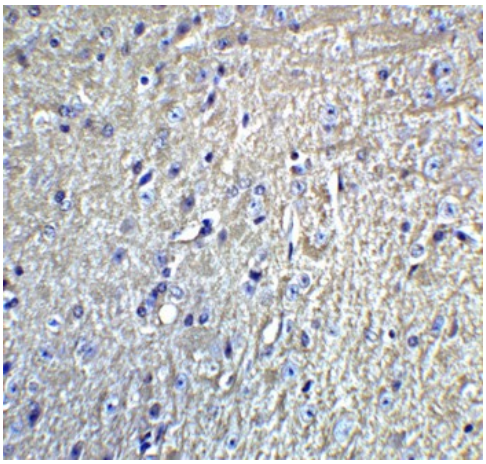
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

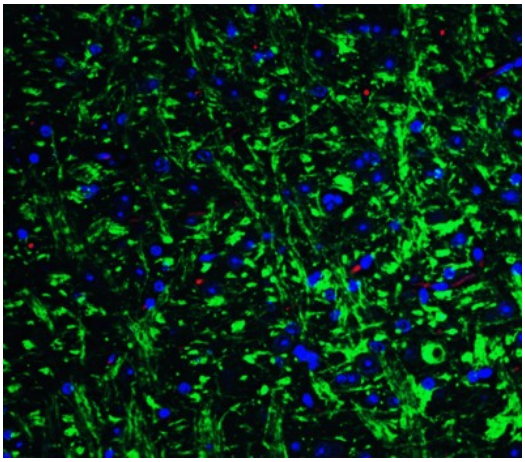
Shipping Condition:	Wet Ice
Storage Condition:	Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.

Expiration: Expiration date is one (1) year from date of receipt.

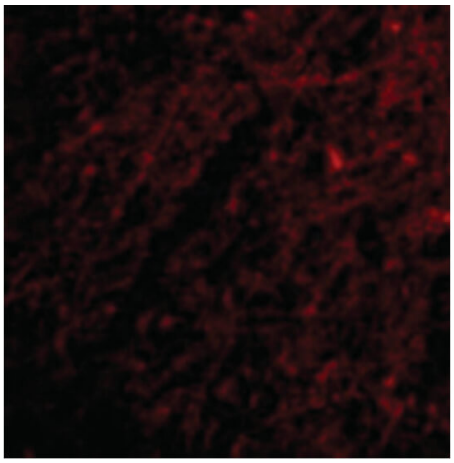
Images



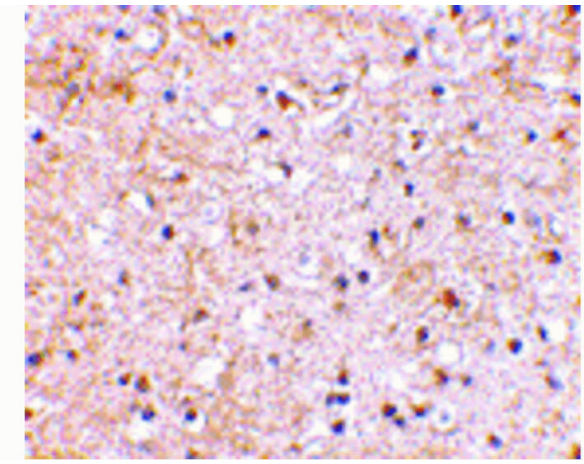
Immunohistochemistry
Immunohistochemistry of Grik1 in mouse brain tissue with Grik1 Antibody at 5 µg/mL.



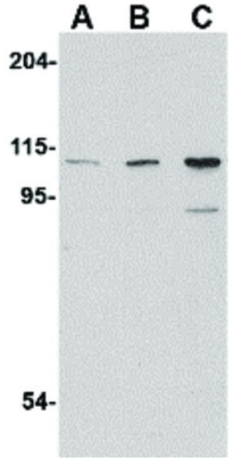
Immunofluorescence Microscopy
Immunofluorescence of Grik1 in mouse brain tissue with Grik1 Antibody at 20 µg/mL. Green: Grik1 antibody. Red: Phylloidin staining. Blue: DAPI staining.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of Grik1 antibody. Tissue: Human brain cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: Grik1 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: Grik1 as a red fluorescent signal.



Immunohistochemistry
Immunohistochemistry of Grik1 antibody. Tissue: Human brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Grik1 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Grik1 is nuclear and occasionally cytoplasmic. Staining: Grik1 as precipitated red signal with hematoxylin purple nuclear counterstain.



Western Blot
Western Blot of Grik1 antibody. Lane A: P815 cell lysate at 0.5 µg/mL. Lane B: P815 cell lysate at 1 µg/mL. Lane C: P815 cell lysate at 2 µg/mL. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 103.9 kDa, ~110 kDa for Grik1. Other band(s): Grik1 splice variants and isoforms.

Disclaimer

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