Datasheet for 200-401-DN8

PIKE Antibody

Overview

Description:	Anti-PIKE (RABBIT) Antibody - 200-401-DN8
Item No.:	200-401-DN8
Size:	100 µg
Applications:	ELISA, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	Phosphoinositide 3 kinase enhancer (PIKE) is a recently identified nuclear GTPase that interacts with nuclear phosphoinositide 3-kinase (PI3 kinase) to stimulate its lipid kinase activity. PIKE exists in multiple isoforms; a shorter C-terminal isoform (PIKE-A) has also been identified as centaurin gamma 1. The longest isoform (PIKE-L) has been shown to bind to the adaptor protein Homer and thereby link to metabotropic glutamate receptors, leading to activation of PI3 kinase activity and prevention of neuronal apoptosis. Overexpression of PIKE-A enhances Akt activity and promotes cancer cell invasion, whereas decreased expression of PIKE-A via dominant negative expression of PIKE-A or PIKE-A knockdown inhibits these processes. In many human cancers, expression of PIKE-A is enhanced, leading to increased Akt activity and preventing apoptosis.
Synonyms:	PIKE Antibody, AGAP2, GGAP2, CENTG1, KIAA0167, Arf-GAP with GTPase, ANK repeat and PH domain-containing protein 2, Centaurin-gamma-1, AGAP-2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	AGAP2
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-PIKE antibody was prepared from whole rabbit serum produced by repeated immunizations with a peptide corresponding to 15 amino acids near the C-terminus of human PIKE.
Purity/Specificity:	Anti-PIKE Antibody is purified by ion exchange chromatography. Anti-PIKE will detect both PIKE-L and PIKE-A isoforms.
Relevant Links:	• UniProtKB - Q99490 • GeneID - 116986 • NCBI - AAM97540

Application Details

Tested Applications:	ELISA, IHC, WB
Application Note:	Anti-PIKE Antibody has been tested for use in ELISA, Western Blotting, and Immunohistochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 125 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:	1:5,000-1:20,000
IHC:	10 µg/mL
WB:	0.5-2 µg/mL

Formulation

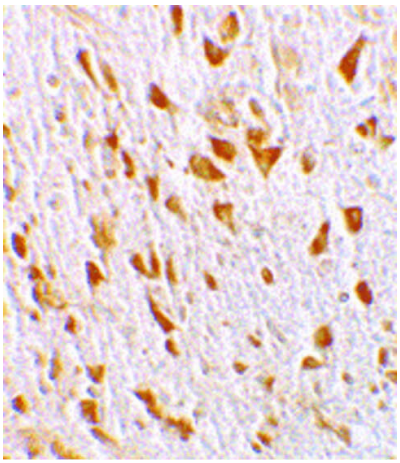
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

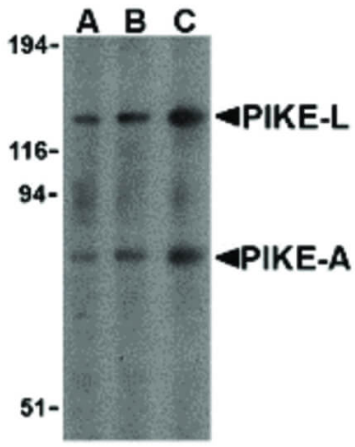
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

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

Images



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



Western Blot
Western Blot of PIKE antibody in mouse brain cell lysates. Lane A: PIKE antibody at 0.5 µg/mL. Lane B: PIKE antibody at 1 µg/mL. Lane C: PIKE antibody at 2 µg/mL. Load: 35 µg per lane. Primary antibody: PIKE antibody at designated concentrations for overnight at 4°C. 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: 125 kDa, 120 kDa for PIKE. Other band(s): PIKE splice variants and isoforms.

References

- Lautz JD et al. Synaptic protein interaction networks encode experience by assuming stimulus-specific and brain-region-specific states. *Cell Rep.* (2021)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.