Datasheet for 600-401-452

NEK2 Antibody

Overview

Description:	Anti-NEK2 (RABBIT) Antibody - 600-401-452
Item No.:	600-401-452
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Mouse
Host Species:	Rabbit

Product Details

Background:	NEK2, also called serine/threonine-protein kinase Nek2NimA-related protein kinase 2, NimA-like protein kinase 1 and HSPK 21, is a protein kinase involved in mitotic regulation that may have a role at the G₂-M transition and may also play a role in meiosis. NEK2 has a nuclear localization and accumulates throughout S phase and shows maximal levels in late G₂. This expression pattern is highly reminiscent of that of A and B cyclins.
Synonyms:	rabbit anti-NEK2 antibody, Serine threonine protein kinase Nek2 antibody, HSPK 21 antibody, NEK 2 antibody, NEK2A antibody, NIMA, never in mitosis a-related kinase 2 antibody, NimA-like protein kinase 1 antibody, NIMA related kinase 2 antibody, NEK-2, NLK1, NLK-1, NEK2A, HSPK21
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	NEK2
Reactivity:	Mouse
Immunogen Type:	Conjugated Peptide
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near aa 275-300 of Human NEK2 protein.

Purity/Specificity:	This product is an affinity-purified antibody produced by immunoaffinity chromatography using peptide coupled to agarose beads. BLAST analysis indicates 100 % homology of the immunizing sequence with NEK2 homologues from human and chimpanzee. Cross reactivity with NEK2 protein homologues from other sources may not occur as sequence homology varies by at least one amino acid residue in this sequence.
Relevant Links:	• UniProtKB - P51955 • NCBI - 57791147 • GeneID - 4751

Application Details

Tested Applications:	ELISA, WB
Application Note:	This affinity purified antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 52 kDa in size corresponding to NEK2 protein by western blotting in the appropriate cell lysate or extract. Splice variants exist for this protein that may result in the detection of lower molecular weight bands.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:2,000 - 1:10,000
IF:	User Optimized
WB:	1:500 - 1:2,000

Formulation

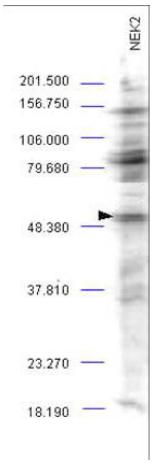
Physical State:	Liquid (sterile filtered)
Concentration:	1.1 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

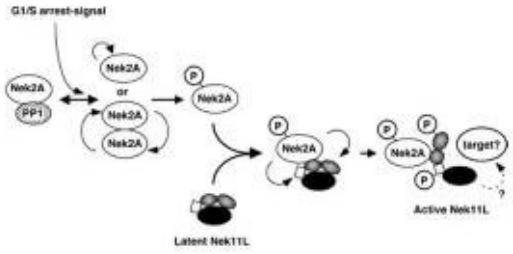
Shipping Condition:	Dry Ice

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.

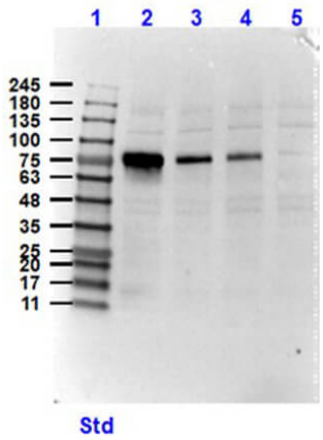
Images



Western Blot
Western blot analysis is shown using Rockland's Affinity Purified anti-NEK2 antibody to detect endogenous protein present in an unstimulated mouse A-20 whole cell lysate (arrowhead). Comparison to a molecular weight marker indicates a band of ~52 kDa correspond-ing to NEK2 protein. The blot was incubated with a 1:500 dilution of the antibody at room temperature followed by detection using standard techniques. Personal communication Steven Pelech, Kinexus Inc.



Pathway
Possible model for NEK2 action.



Western Blot

Western Blot of Rabbit Anti-NEK2 Antibody. Lane 1: Opal Pre-stained Molecular Weight Marker (p/n MB-210-0500). Lane 2: Jurkat cell lysate (10µg) spiked with rec. NEK2 protein (50ng). Lane 3: Jurkat cell lysate (10µg) spiked with rec. NEK2 protein (20ng). Lane 4: Jurkat cell lysate (10µg) spiked with rec. NEK2 protein (20ng). Lane 5: Jurkat cell lysate (10µg) (p/n W09-001-370). Primary Antibody: Anti-NEK2 at 1µg/mL overnight at 2-8°C. Secondary Antibody: Goat Anti-Rabbit IgG HRP (p/n 611-103-122) at 1:70,000 for 30mins at RT. Block: BlockOut Buffer (p/n MB-073). Expect/Observed MW: ~76kDa rec NEK2.

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.