

## Anti-NEK2 Antibody

Catalog Number: A01606

### Introduction

The antibody is directed against Thy-1 present in human brain, with small amounts in kidney. The 23.5kD a Thy-1 antigen is absent from human thymocytes and peripheral lymphocytes. Thymus, lymph node and spleen have small populations of F15-42-1-5 positive cells.

This antibody is routinely tested by flow cytometric analysis. Flow cytometry and other applications were tested during antibody development or are reported in the literature.

### Application Information

Each lot of this antibody has been quality control tested by flow cytometric analysis of human PBMCs. For flow cytometric staining, the recommended use of this antibody is  $\leq 0.5\mu\text{g}$  per  $1 \times 10^6$  cells in  $100\mu\text{l}$  of staining volume. It is strongly suggested that the antibody reactivity be empirically titrated for optimal performance in the application of interest.

### About NEK2

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  $G_2$ -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  $G_2$ . This expression pattern is highly reminiscent of that of A and B cyclins.

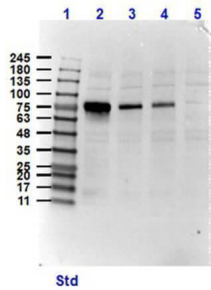
### Overview

Product Name	Anti-NEK2 Antibody
Reactive Species	Mouse
Description	Boster Bio Anti-NEK2 Antibody (Catalog # A01606). Tested in ELISA, WB applications. This antibody reacts with Mouse.
Application	ELISA, IF, WB
Clonality	Polyclonal
Formulation	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2, 0.01% (w/v) Sodium Azide
Storage Instructions	Store vial at $-20^\circ\text{C}$ prior to opening. Aliquot contents and freeze at $-20^\circ\text{C}$ 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 $4^\circ\text{C}$ as an undiluted liquid. Dilute only prior to immediate use. Expiration date is one (1) year from date of opening. (Ship on dry ice.)
Host	Rabbit
Uniprot ID	P51955

## Technical Details

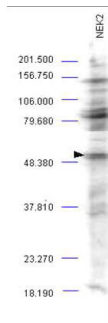
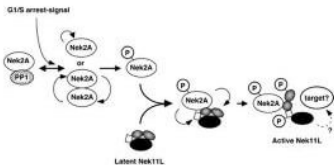
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near aa 275-300 of Human NEK2 protein.
Predicted Reactive Species	Bovine, Chicken, Xenopus Laevis, Xenopus Tropicalis, Zebrafish
Cross Reactivity	Predicted species reactivity based on epitope sequence homology: human, mouse, bovine, horse, rhesus macaque, dog, chimpanzee.
Isotype	IgG
Form	Liquid (sterile filtered)
Concentration	1.1 mg/mL by UV absorbance at 280 nm
Purification	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.
Suggested Dilutions	ELISA: 1:2,000 - 1:10,000 IF Microscopy: User optimized WB: 1:500 - 1:2,000 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.

## Anti-NEK2 Antibody (A01606) Images



Western Blot of Rabbit Anti-NEK2 Antibody. Lane 1: Opal Pre-stained Molecular Weight Marker . 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) . Primary Antibody: Anti-NEK2 at 1µg/mL overnight at 2-8°C. Secondary Antibody: Goat Anti-Rabbit IgG HRP at 1:70,000 for 30mins at RT. Block: BlockOut Buffer . Expect/Observed MW: ~76kDa rec NEK2.

Possible model for NEK2 action.



Western blot analysis is shown using Boster'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 corresponding 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.

### Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



### Anti-NEK2 Antibody

For Research Use Only. Not for use in diagnostic procedures.