Datasheet for ABIN968053

anti-NEK2 antibody (AA 244-444)

2 Images | 1 Publication

Go to Product page

Overview

Quantity:	50 µg
Target:	NEK2
Binding Specificity:	AA 244-444
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This NEK2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunoprecipitation (IP), Immunohistochemistry (Formalin-fixed Sections) (IHC (f))

Product Details

Immunogen:	Human Nek2 aa. 244-444
Clone:	20-Nek2
Isotype:	IgG1
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

Product Details

	chromatography.

Target Details

Target:	NEK2
Alternative Name:	Nek2 (NEK2 Products)
Background:	Reversible protein phosphorylation is critical for progression through the cell cycle and mitosis. In Aspergillus nidulans, the nima gene (never in mitosis) encodes a protein kinase that is essential for mitosis. Three human genes (nek1, 2, and 3 [Nima-related kinase]) with significant homology to the A. nidulans nima have been reported. The nek2 gene encodes a protein of 445 amino acids and, like its fungal homolog, its expression is regulated throughout the cell cycle. In Hela cells, Nek2 activity and expression are low during M and G1 phases of the cell cycle. However, both parameters increase during S phase and mitosis. In addition, Nek2 phosphorylates protein substrates exclusively at serine and threonine residues. Thus, like its fungal homolog, Nek2 may be a crucial element in controlling the cell's entry into S phase and mitosis. This antibody is routinely tested by western blot analysis. Synonyms: Nima Related Kinase 2
Molecular Weight:	46 kDa
Pathways:	M Phase

Application Details

Comment:	Related Products: ABIN968537, ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C

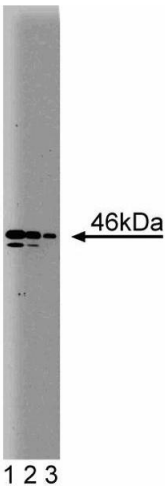
Handling

Storage Comment:	Store undiluted at -20° C.

Publications

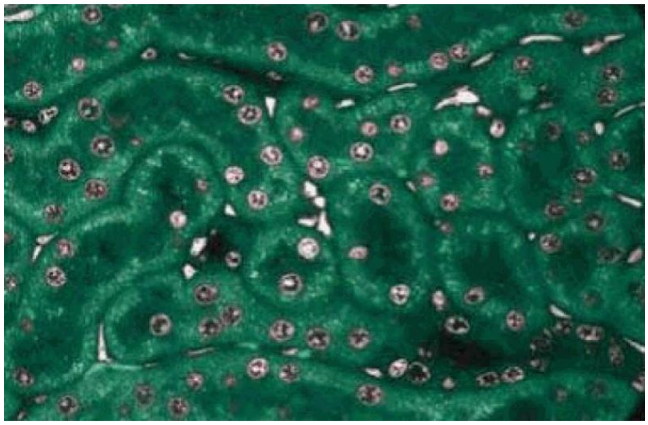
Product cited in:	Fry, Schultz, Bartek, Nigg: "Substrate specificity and cell cycle regulation of the Nek2 protein kinase, a potential human homolog of the mitotic regulator NIMA of Aspergillus nidulans." in: **The Journal of biological chemistry**, Vol. 270, Issue 21, pp. 12899-905, (1995) (PubMed).

Images



Western Blotting

Image 1. Western blot analysis of Nek2 on a Jurkat cell lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the anti- human Nek2 antibody.



Immunofluorescence

Image 2. Immunofluorescence staining of rabbit kidney.