

IHC*easy* NEK6 Ready-To-Use IHC Kit

Catalog Number: **KHC1945**

General Information

Sample type:
FFPE tissue

Cited sample type:

Reactivity:
Human, Mouse, Rat

Cited Reactivity:

Assay type:
Immunohistochemistry

Primary antibody type:
Rabbit Polyclonal

Secondary antibody type:
Polymer-HRP-Goat anti-Rabbit

Kit Component

Component	Size	Concentration
Antigen Retrieval Buffer	100 mL	50×
Washing Buffer	100 mL ×2	20×
Blocking Buffer	5 mL	RTU
Primary Antibody	5 mL	RTU
Secondary Antibody	5 mL	RTU
Chromogen Component A	0.2 mL	RTU
Chromogen Component B	4 mL	RTU
Signal Enhancer	5 mL	RTU
Counter Staining Reagent	5 mL	RTU
Mounting Media	5 mL	RTU
Control Slide	1 slide (Optional)	FFPE
Datasheet	1 Copy	
Manual	1 Copy	

Storage Instructions

All the reagents are stored at 2-8°C. The kit is stable for 6 months from the date of receipt.

Background

The *Aspergillus nidulans* 'never in mitosis A' (NIMA) is a serine/ threonine kinase that controls initiation of mitosis, whereas its inactivation is necessary for mitotic exit. NIMA-related kinases (NEKs) are a group of protein kinases that are homologous to NIMA. Evidence suggests that NEKs perform functions similar to those of NIMA. Human NIMA-related kinase 6 (NEK6, synonym: SID6-1512) is comprised of 338 amino acids and shows both nuclear and cytoplasmic localizations in HeLa cells. NEK6 is required for mitotic progression of human cells. NEK6 is phosphorylated and activated during M phase. Inhibition of Nek6 function by either overexpression of an inactive Nek6 mutant or elimination of endogenous Nek6 by siRNA arrests cells in M phase and triggers apoptosis. Recombinant human NEK6 protein produced in insect cells effectively phosphorylates histones H1 and H3, but not casein. Thus, these results suggest that, unlike other mammalian NIMA-related kinases, NEK6 is a mitotic histone kinase which regulates chromatin condensation in mammalian cells. NEK6 transcripts are ubiquitously expressed with the highest expression found in the heart and skeletal muscle, and the hNek6 gene is localized to human chromosome 9q33-34.

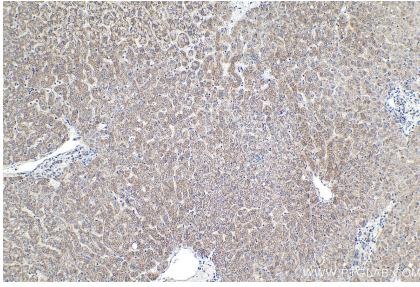
Synonyms

NEK6, NimA related protein kinase 6, Protein kinase SID6 1512, SID6 1512

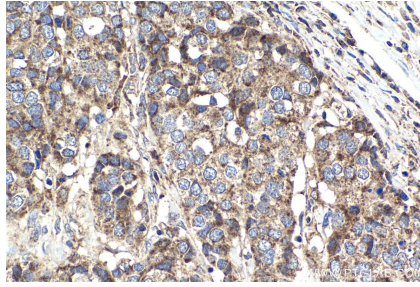
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

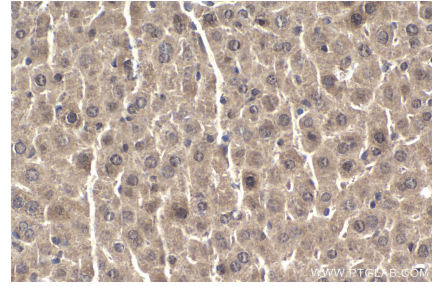
Selected Validation Data



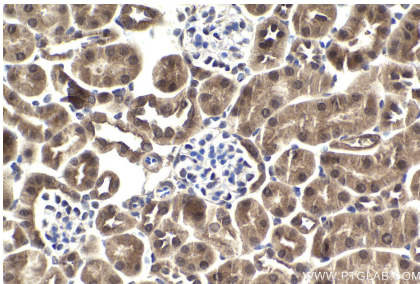
Immunohistochemical analysis of paraffin-embedded human liver tissue slide using KHC1945 (NEK6 IHC Kit).



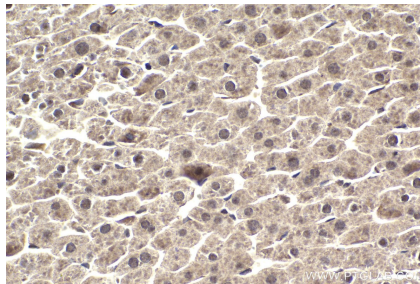
Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using KHC1945 (NEK6 IHC Kit).



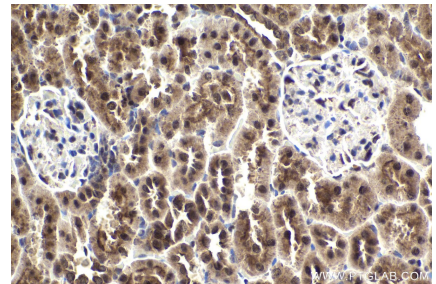
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using KHC1945 (NEK6 IHC Kit).



Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using KHC1945 (NEK6 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat liver tissue slide using KHC1945 (NEK6 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat kidney tissue slide using KHC1945 (NEK6 IHC Kit).