

## **NEK6 Antibody (N-term)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8077a

## **Specification**

## **NEK6 Antibody (N-term) - Product Information**

Application WB,E
Primary Accession O9HC98

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 8-39

## **NEK6 Antibody (N-term) - Additional Information**

## **Gene ID** 10783

### **Other Names**

Serine/threonine-protein kinase Nek6, Never in mitosis A-related kinase 6, NimA-related protein kinase 6, Protein kinase SID6-1512, NEK6

# **Target/Specificity**

This NEK6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 8-39 amino acids from the N-terminal region of human NEK6.

### **Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

## **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

# **Precautions**

NEK6 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## **NEK6 Antibody (N-term) - Protein Information**

### Name NEK6 (HGNC:7749)

**Function** Protein kinase which plays an important role in mitotic cell cycle progression (PubMed: 11516946, PubMed: 14563848). Required for chromosome segregation at



metaphase-anaphase transition, robust mitotic spindle formation and cytokinesis (PubMed:19414596). Phosphorylates ATF4, CIR1, PTN, RAD26L, RBBP6, RPS7, RPS6KB1, TRIP4, STAT3 and histones H1 and H3 (PubMed:12054534, PubMed:20873783). Phosphorylates KIF11 to promote mitotic spindle formation (PubMed:19001501). Involved in G2/M phase cell cycle arrest induced by DNA damage (PubMed:18728393). Inhibition of activity results in apoptosis. May contribute to tumorigenesis by suppressing p53/TP53-induced cancer cell senescence (PubMed:21099361). Phosphorylates EML4 at 'Ser-144', promoting its dissociation from microtubules during mitosis which is required for efficient chromosome congression (PubMed:31409757).

### **Cellular Location**

Cytoplasm. Nucleus. Nucleus speckle. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle pole. Note=Colocalizes with APBB1 at the nuclear speckles. Colocalizes with PIN1 in the nucleus. Colocalizes with ATF4, CIR1, ARHGAP33, ANKRA2, CDC42, NEK9, RAD26L, RBBP6, RPS7, TRIP4, RELB and PHF1 in the centrosome. Localizes to spindle microtubules in metaphase and anaphase and to the midbody during cytokinesis

### **Tissue Location**

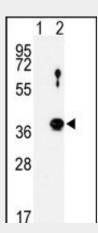
Ubiquitous, with highest expression in heart and skeletal muscle.

## **NEK6 Antibody (N-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **NEK6 Antibody (N-term) - Images**



Western blot analysis of NEK6 (arrow) using rabbit polyclonal NEK6 Antibody (N-term)(Cat.#AP8077a).293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the NEK6 gene (Lane 2) (Origene Technologies).

## NEK6 Antibody (N-term) - Background





Tel: 858.875.1900 Fax: 858.875.1999

NEK6 is a serine/threonine kinase that controls initiation of mitosis. NEK6 is activated during M phase. It is required for chromosome segregation at metaphase-anaphase transition and therefore for mitotic progression. Inhibition of activity results in apoptosis.

# **NEK6 Antibody (N-term) - References**

Belham, C., et al., J. Biol. Chem. 278(37):34897-34909 (2003). Lizcano, J.M., et al., J. Biol. Chem. 277(31):27839-27849 (2002). Hashimoto, Y., et al., Biochem. Biophys. Res. Commun. 293(2):753-758 (2002). Li, M.Z., et al., Cytogenet. Cell Genet. 87 (3-4), 271-272 (1999). **NEK6 Antibody (N-term) - Citations** 

 Integrative approach for differentially overexpressed genes in gastric cancer by combining large-scale gene expression profiling and network analysis.