

# Mouse Nek6 Antibody (C-term) Blocking peptide

Synthetic peptide Catalog # BP13926b

### **Specification**

### Mouse Nek6 Antibody (C-term) Blocking peptide - Product Information

**Primary Accession** 

**Q9ES70** 

# Mouse Nek6 Antibody (C-term) Blocking peptide - Additional Information

**Gene ID 59126** 

#### **Other Names**

Serine/threonine-protein kinase Nek6, Never in mitosis A-related kinase 6, NimA-related protein kinase 6, Nek6

### Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13926b was selected from the C-term region of Mouse Nek6. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### Mouse Nek6 Antibody (C-term) Blocking peptide - Protein Information

Name Nek6 {ECO:0000312|MGI:MGI:1891638}

#### **Function**

Protein kinase which plays an important role in mitotic cell cycle progression. Required for chromosome segregation at metaphase- anaphase transition, robust mitotic spindle formation and cytokinesis. Phosphorylates ATF4, CIR1, PTN, RAD26L, RBBP6, RPS7, TRIP4, RPS6KB1 and histones H1 and H3. Phosphorylates KIF11 to promote mitotic spindle formation. Involved in G2/M phase cell cycle arrest induced by DNA damage. Inhibition of activity results in apoptosis. May contribute to tumorigenesis by suppressing p53/TP53-induced cancer cell senescence (By similarity). Phosphorylates STAT3 (PubMed:<a href="http://www.uniprot.org/citations/20595392" target="\_blank">20595392</a>). Phosphorylates EML4 at 'Ser-144', promoting its dissociation from microtubules during mitosis which is required for efficient chromosome congression (By similarity).

### **Cellular Location**



Cytoplasm. Nucleus. Nucleus speckle. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle pole. Note=Co- localizes 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 (By similarity)

**Tissue Location**Highly expressed in the liver.

### Mouse Nek6 Antibody (C-term) Blocking peptide - Protocols

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

#### • Blocking Peptides

Mouse Nek6 Antibody (C-term) Blocking peptide - Images

# Mouse Nek6 Antibody (C-term) Blocking peptide - Background

Activated during M phase. Required for chromosome segregation at metaphase-anaphase transition and therefore for mitotic progression. Inhibition of activity results in apoptosis (By similarity).

# Mouse Nek6 Antibody (C-term) Blocking peptide - References

Jeon, Y.J., et al. J. Biol. Chem. 285(36):28126-28133(2010)Kaput, J., et al. Physiol. Genomics 18(3):316-324(2004)Visel, A., et al. Nucleic Acids Res. 32 (DATABASE ISSUE), D552-D556 (2004):Hashimoto, Y., et al. Biochem. Biophys. Res. Commun. 293(2):753-758(2002)Feige, E., et al. Mech. Dev. 110 (1-2), 219-223 (2002):