

Mouse Nek6 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13926b

Specification

Mouse Nek6 Antibody (C-term) - Product Information

Application IHC-P, WB,E Primary Accession Q9ES70

Other Accession <u>P59895</u>, <u>A2BD05</u>, <u>O9HC98</u>, <u>NP 001153103.1</u>,

NP_067619.1

Reactivity Human, Mouse

Predicted Pig, Rat
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 35742
Antigen Region 251-280

Mouse Nek6 Antibody (C-term) - 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

This Mouse Nek6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 251-280 amino acids from the C-terminal region of mouse Nek6.

Dilution

IHC-P~~1:10~50 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 purified through a protein A column, followed by peptide affinity purification.

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

Mouse Nek6 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Nek6 Antibody (C-term) - 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:20595392). 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

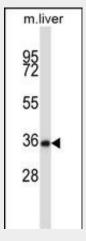
Highly expressed in the liver.

Mouse Nek6 Antibody (C-term) - Protocols

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

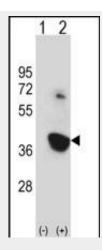
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Mouse Nek6 Antibody (C-term) - Images

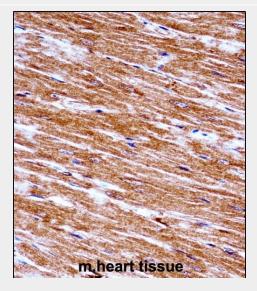


Mouse Nek6 Antibody (C-term) (Cat. #AP13926b) western blot analysis in mouse liver tissue lysates (35ug/lane). This demonstrates the Nek6 antibody detected the Nek6 protein (arrow).





Western blot analysis of Nek6 (arrow) using rabbit polyclonal Mouse Nek6 Antibody (C-term) (Cat. #AP13926b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the Nek6 gene.



Mouse Nek6 Antibody (C-term) (AP13926b)immunohistochemistry analysis in formalin fixed and paraffin embedded mouse heart tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of Mouse Nek6 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Mouse Nek6 Antibody (C-term) - 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) - 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):