

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, CIRSR, 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, CIRSR, 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

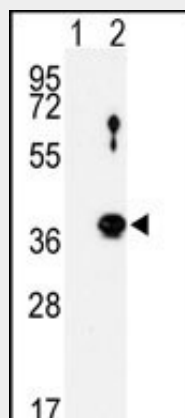
Ubiquitous, with highest expression in heart and skeletal muscle.

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 Cytometry](#)
- [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

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.](#)