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NEK6 Antibody (C-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS10899

Specification

NEK6 Antibody (C-Terminus) - Product Information

Application	**IHC-P**
Primary Accession	Q9HC98
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**36kDa KDa**
Dilution	**IHC-P~~N/A**

NEK6 Antibody (C-Terminus) - Additional Information

Gene ID 10783

Other Names
Serine/threonine-protein kinase Nek6, 2.7.11.1, Never in mitosis A-related kinase 6, NimA-related protein kinase 6, Protein kinase SID6-1512, NEK6

Target/Specificity
Human NEK6. BLAST analysis of the peptide immunogen showed no homology with other human proteins, except NEK7 (61%).

Reconstitution & Storage
Long term: -70°C; Short term: +4°C

Precautions
NEK6 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

NEK6 Antibody (C-Terminus) - 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:<a

href="http://www.uniprot.org/citations/19001501" target="_blank">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.

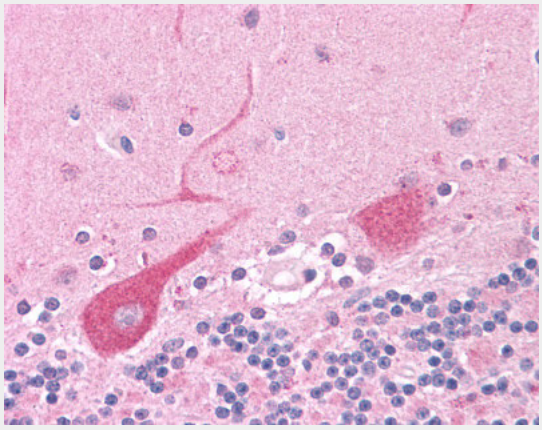
Volume
50 µl

NEK6 Antibody (C-Terminus) - 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 (C-Terminus) - Images



Anti-NEK6 antibody ALS10899 IHC of human brain, Purkinje neurons.

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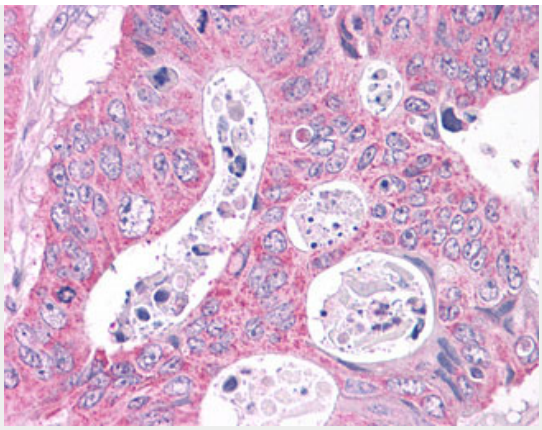

Anti-NEK6 antibody IHC of human Colon, Carcinoma.

NEK6 Antibody (C-Terminus) - Background

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, RPS6KB1, TRIP4, STAT3 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.

NEK6 Antibody (C-Terminus) - References

Hashimoto Y.,et al.Biochem. Biophys. Res. Commun. 293:753-758(2002).
Saito T.,et al.Submitted (APR-1999) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Humphray S.J.,et al.Nature 429:369-374(2004).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.