

KD-Validated Anti-NIMA Related Kinase 6 Rabbit Monoclonal Antibody
Rabbit monoclonal antibody
Catalog # AGI1624**Specification****KD-Validated Anti-NIMA Related Kinase 6 Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC, ICC
Primary Accession	O9HC98
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 36 kDa , observed , 28 kDa KDa
Gene Name	NEK6
Aliases	NIMA Related Kinase 6; SID6-1512; NIMA (Never In Mitosis Gene A)-Related Kinase 6; Putative Serine-Threonine Protein Kinase; Serine/Threonine-Protein Kinase Nek6; Never In Mitosis A-Related Kinase 6; NimA-Related Protein Kinase 6; Protein Kinase SID6-1512; EC 2.7.11.34; EC 2.7.11.1
Immunogen	A synthesized peptide derived from human NEK6

KD-Validated Anti-NIMA Related Kinase 6 Rabbit Monoclonal Antibody - Additional InformationGene ID **10783****Other Names**

Serine/threonine-protein kinase Nek6, 2.7.11.34, Never in mitosis A-related kinase 6, NimA-related protein kinase 6, Protein kinase SID6-1512, NEK6 (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=7749)
target="_blank">HGNC:7749)

KD-Validated Anti-NIMA Related Kinase 6 Rabbit Monoclonal Antibody - Protein Information**Name** NEK6 ([HGNC:7749](#))**Function**

Protein kinase which plays an important role in mitotic cell cycle progression (PubMed: [11516946](http://www.uniprot.org/citations/11516946), PubMed: [14563848](http://www.uniprot.org/citations/14563848)). Required for chromosome segregation at metaphase-anaphase transition, robust mitotic spindle formation and cytokinesis (PubMed: [19414596](http://www.uniprot.org/citations/19414596)). Phosphorylates ATF4, CIR1, PTN, RAD26L, RBBP6, RPS7, RPS6KB1, TRIP4, STAT3 and histones H1 and H3 (PubMed: [19414596](#)).

[12054534](http://www.uniprot.org/citations/12054534), PubMed: [20873783](http://www.uniprot.org/citations/20873783)).
 Phosphorylates KIF11 to promote mitotic spindle formation (PubMed: [19001501](http://www.uniprot.org/citations/19001501)). Involved in G2/M phase cell cycle arrest induced by DNA damage (PubMed: [18728393](http://www.uniprot.org/citations/18728393)). Inhibition of activity results in apoptosis. May contribute to tumorigenesis by suppressing p53/TP53-induced cancer cell senescence (PubMed: [21099361](http://www.uniprot.org/citations/21099361)). Phosphorylates EML4 at 'Ser-144', promoting its dissociation from microtubules during mitosis which is required for efficient chromosome congression (PubMed: [31409757](http://www.uniprot.org/citations/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

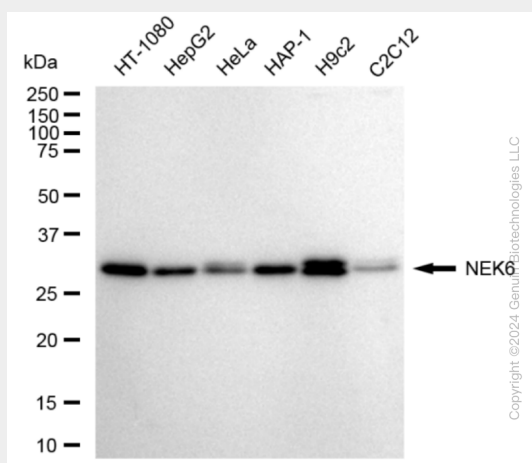
Ubiquitous, with highest expression in heart and skeletal muscle.

KD-Validated Anti-NIMA Related Kinase 6 Rabbit Monoclonal Antibody - Protocols

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

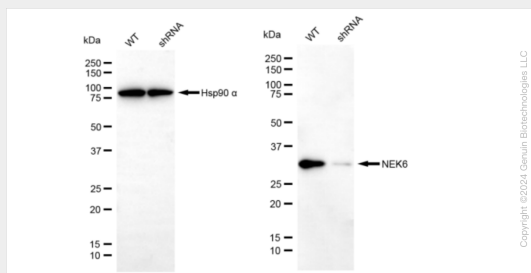
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KD-Validated Anti-NIMA Related Kinase 6 Rabbit Monoclonal Antibody - Images

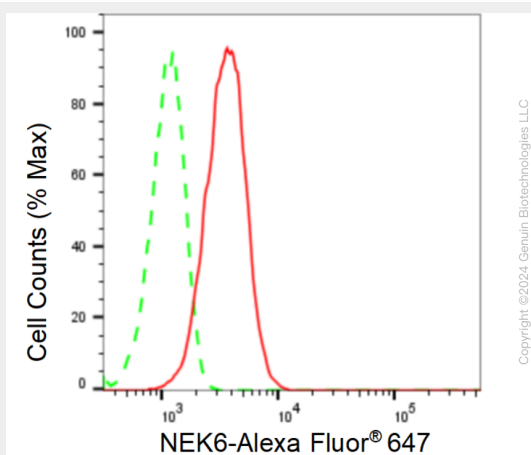


Western blotting analysis using anti-NEK6 antibody (Cat#AGI1624). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-NEK6

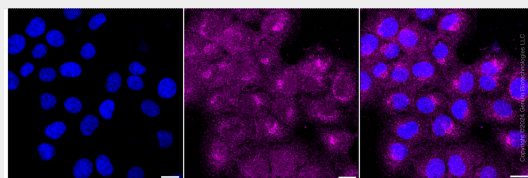
antibody (Cat#AGI1624, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-NEK6 antibody (Cat#AGI1624). NEK6 expression in wild type (WT) and NEK6 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-NEK6 antibody (Cat#AGI1624, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of NEK6 expression in HT-1080 cells using NEK6 antibody (Cat#AGI1624, 1:2,000). Green, isotype control; red, NEK6.



Immunocytochemical staining of HT-1080 cells with anti-NEK6 antibody (Cat#AGI1624, 1:1,000). Nuclei were stained blue with DAPI; NEK6 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.