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

Rabbit monoclonal antibody
Catalog # AGI1624

Product Information

Application	WB, FC, ICC
Primary Accession	Q9HC98
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	24GB755
Calculated MW	35714
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

Additional Information

Gene 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 (HGNC:7749)

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.

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