

Product name:	Nek9 Rabbit Polyclonal Antibody
Cat number:	ABN14559
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human NEK9. AA range:176-225
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,ICC/IF 1:200-1:1000,ELISA 1:10000-1:20000
Molecular Weight:	107kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene encodes a member of the NimA (never in mitosis A) family of serine/threonine protein kinases. The encoded protein is activated in mitosis and, in turn, activates other family members during mitosis. This protein also mediates cellular processes that are essential for interphase progression. [provided by RefSeq, Jul 2016], catalytic activity: ATP + a protein = ADP + a phosphoprotein., cofactor: Magnesium., developmental stage: Expression varied mildly across the cell cycle, with highest expression observed in G1 and stationary-phase cells., domain: Dimerizes through its coiled-coil domain., enzyme regulation: Activated during mitosis by intramolecular autophosphorylation. Activity and autophosphorylation is activated by manganese >> magnesium ions. Sensitive to increasing concentration of detergents. It is not cell-cycle regulated but activity is higher in G0-arrested cells., function: Pleiotropic regulator of mitotic progression, participating in the control of spindle dynamics and chromosome separation. Phosphorylates different histones, myelin basic protein, beta-casein, and BICD2. Phosphorylates histone H3 on serine and threonine residues and beta-casein on serine residues. Important for G1/S transition and S phase progression., PTM: Autophosphorylated on serine and threonine residues. When complexed with FACT, exhibits markedly elevated phosphorylation on Thr-210. During mitosis, not phosphorylated on Thr-210. Phosphorylated by CDC2 in vitro., similarity: Belongs to the protein kinase superfamily. NEK Ser/Thr protein kinase family. NIMA subfamily., similarity: Contains 1 protein kinase domain., similarity: Contains 6 RCC1 repeats., subunit: Homodimer. Binds to Ran GTPase. Has a greater affinity for Ran-GDP over Ran-GTP. Interacts with NEK6, NEK7 and BICD2. Interacts with SSRP1 and SUPT16H, the 2 subunits of the FACT complex., tissue specificity: Most abundant in heart, liver, kidney and testis. Also expressed in smooth muscle cells and fibroblasts.,