
Product Name: Nek9 (phospho Thr210) Rabbit Polyclonal Antibody**Catalog #: APRab05072**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Phosphorylated
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:10000-1:20000
Molecular Weight	110kDa

Antigen Information

Gene Name	NEK9
Alternative Names	NEK9; KIAA1995; NEK8; NERCC; Serine/threonine-protein kinase Nek9; Nercc1 kinase; Never in mitosis A-related kinase 9; NimA-related protein kinase 9; NimA-related kinase 8; Nek8
Gene ID	91754.0
SwissProt ID	Q8TD19
Immunogen	The antiserum was produced against synthesized peptide derived from human NEK9 around the phosphorylation site of Thr210. AA range:176-225

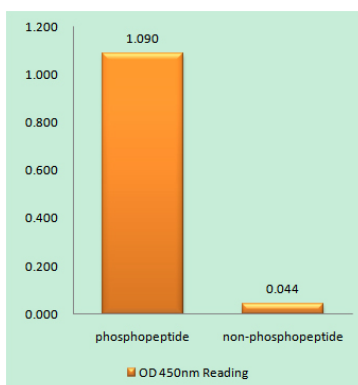
Background

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.,

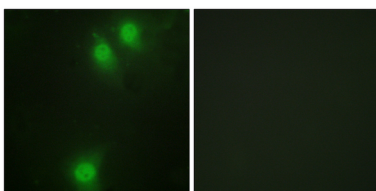
Research Area

Cell Biology

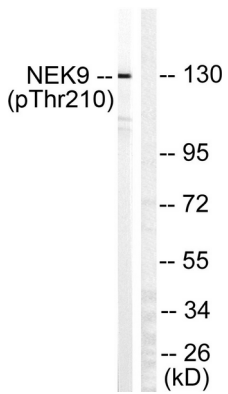
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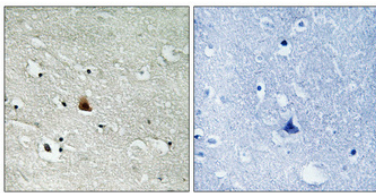
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right) , using NEK9 (Phospho-Thr210) Antibody



Immunofluorescence analysis of HeLa cells, using NEK9 (Phospho-Thr210) Antibody. The picture on the right is blocked with the phosphopeptide.



Western blot analysis of lysates from HepG2 cells, using NEK9 (Phospho-Thr210) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100 (4°, overnight) . High-pressure and temperature Tris-EDTA, pH8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.