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NEK8 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7095b

Product Information

Application	WB, E
Primary Accession	Q86SG6
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB5458
Calculated MW	74806
Antigen Region	573-604

Additional Information

Gene ID	284086
Other Names	Serine/threonine-protein kinase Nek8, Never in mitosis A-related kinase 8, NimA-related protein kinase 8, Nima-related protein kinase 12a, NEK8, JCK, NEK12A
Target/Specificity	This NEK8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 573-604 amino acids from the C-terminal region of human NEK8.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	NEK8 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NEK8
Synonyms	JCK, NEK12A
Function	Required for renal tubular integrity. May regulate local cytoskeletal

	structure in kidney tubule epithelial cells. May regulate ciliary biogenesis through targeting of proteins to the cilia (PubMed:37598857). Plays a role in organogenesis, and is involved in the regulation of the Hippo signaling pathway (PubMed:26967905).
Cellular Location	Cytoplasm. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q91ZR4}. Cell projection, cilium. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, cilium axoneme. Note=Predominantly cytoplasmic Localizes to the proximal region of the primary cilium and is not observed in dividing cells. {ECO:0000250|UniProtKB:Q91ZR4}
Tissue Location	Highest expression in thyroid, adrenal gland and skin. Low levels in spleen, colon and uterus. Overexpressed in breast tumors, with highest expression in infiltrating ductal carcinomas and moderate levels in mucinous adenocarcinoma

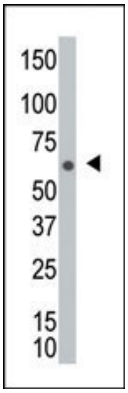
Background

NEK8 is a member of the serine/threionine protein kinase family related to NIMA (never in mitosis, gene A) of Aspergillus nidulans. The encoded protein may play a role in cell cycle progression from G2 to M phase. Mutations in the related mouse gene are associated with a disease phenotype that closely parallels the juvenile autosomal recessive form of polycystic kidney disease in humans.

References

Valkova,N. et al. Mol. Cell Proteomics 4 (7), 1009-1018 (2005)
Bowers,A.J. et al. Gene 328, 135-142 (2004)
Holland,P.M. et al. J. Biol. Chem. 277 (18), 16229-16240 (2002)

Images



The anti-NEK8 Pab (Cat. #AP7095b) is used in Western blot to detect NEK8 in A2058 cell lysate.