

NEK3 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant NEK3.

Catalog # AT3017a

Product Information

Application	WB, IF, E
Primary Accession	P51956
Other Accession	BC019916
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	2F8
Calculated MW	57705

Additional Information

Gene ID	4752
Other Names	Serine/threonine-protein kinase Nek3, HSPK 36, Never in mitosis A-related kinase 3, NimA-related protein kinase 3, NEK3
Target/Specificity	NEK3 (AAH19916, 406 a.a. ~ 506 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	NEK3 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

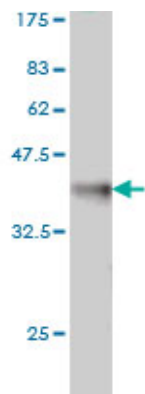
This gene encodes a member of the NimA (never in mitosis A) family of serine/threonine protein kinases. The encoded protein differs from other NimA family members in that it is not cell cycle regulated and is found primarily in the cytoplasm. The kinase is activated by prolactin stimulation, leading to phosphorylation of VAV2 guanine nucleotide exchange factor, paxillin, and activation of the RAC1 GTPase. Multiple transcript variants encoding different isoforms have been found for this gene.

References

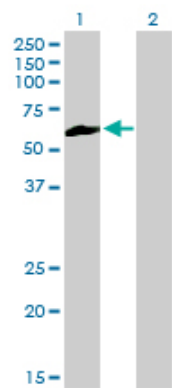
Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype

score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.Nek3 kinase regulates prolactin-mediated cytoskeletal reorganization and motility of breast cancer cells. Miller SL, et al. Oncogene, 2007 Jul 12. PMID 17297458.Is there any association between nek3 and cancers with frequent 13q14 deletion? Hernandez M, et al. Cancer Invest, 2006 Nov. PMID 17118778.Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. Kimura K, et al. Genome Res, 2006 Jan. PMID 16344560.Novel association of Vav2 and Nek3 modulates signaling through the human prolactin receptor. Miller SL, et al. Mol Endocrinol, 2005 Apr. PMID 15618286.

Images

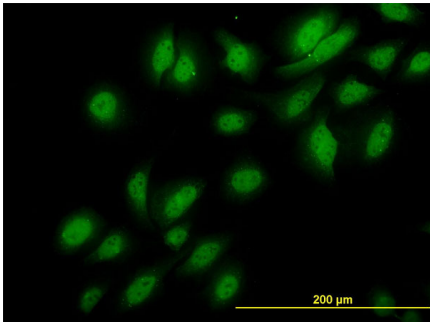


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .

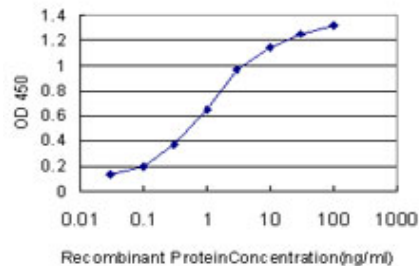


Western Blot analysis of NEK3 expression in transfected 293T cell line by NEK3 monoclonal antibody (M01), clone 2F8.

Lane 1: NEK3 transfected lysate(57.7 KDa).
Lane 2: Non-transfected lysate.



Immunofluorescence of monoclonal antibody to NEK3 on HeLa cell. [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged NEK3 is approximately 0.03ng/ml as a capture antibody.

Citations

- [Identification of NEK3 Threonine 165 as a Novel Regulatory Phosphorylation Site that Modulates Focal Adhesion Remodeling Necessary for Breast Cancer Cell Migration.](#)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.