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NCK1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13726a

Product Information

Application	WB, IHC-P, E
Primary Accession	P16333
Other Accession	NP_006144.1, NP_001177725.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33697
Calculated MW	42864
Antigen Region	63-92

Additional Information

Gene ID	4690
Other Names	Cytoplasmic protein NCK1, NCK adaptor protein 1, Nck-1, SH2/SH3 adaptor protein NCK-alpha, NCK1, NCK
Target/Specificity	This NCK1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 63-92 amino acids from the N-terminal region of human NCK1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	NCK1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NCK1
Synonyms	NCK
Function	Adapter protein which associates with tyrosine-phosphorylated growth

factor receptors, such as KDR and PDGFRB, or their cellular substrates. Maintains low levels of EIF2S1 phosphorylation by promoting its dephosphorylation by PP1. Plays a role in the DNA damage response, not in the detection of the damage by ATM/ATR, but for efficient activation of downstream effectors, such as that of CHEK2. Plays a role in ELK1-dependent transcriptional activation in response to activated Ras signaling. Modulates the activation of EIF2AK2/PKR by dsRNA. May play a role in cell adhesion and migration through interaction with ephrin receptors.

Cellular Location

Cytoplasm. Endoplasmic reticulum. Nucleus. Note=Mostly cytoplasmic, but shuttles between the cytoplasm and the nucleus. Import into the nucleus requires the interaction with SOCS7 Predominantly nuclear following genotoxic stresses, such as UV irradiation, hydroxyurea or mitomycin C treatments

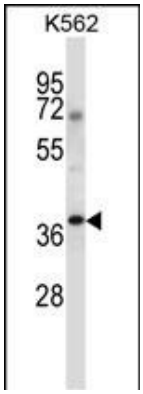
Background

The protein encoded by this gene is one of the signaling and transforming proteins containing Src homology 2 and 3 (SH2 and SH3) domains. It is located in the cytoplasm and is an adaptor protein involved in transducing signals from receptor tyrosine kinases to downstream signal recipients such as RAS. Alternatively spliced transcript variants encoding different isoforms have been found.

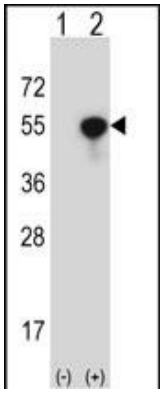
References

Barda-Saad, M., et al. EMBO J. 29(14):2315-2328(2010)
Gehmlich, K., et al. Eur. J. Cell Biol. 89(5):351-364(2010)
Preisinger, C., et al. Cell. Signal. 22(5):848-856(2010)
Davila, S., et al. Genes Immun. 11(3):232-238(2010)
Voss, M., et al. BMC Immunol. 10, 53 (2009) :

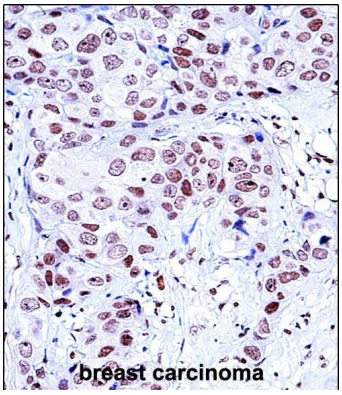
Images



NCK1 Antibody (N-term) (Cat. #AP13726a) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the NCK1 antibody detected the NCK1 protein (arrow).



Western blot analysis of NCK1 (arrow) using rabbit polyclonal NCK1 Antibody (N-term) (Cat. #AP13726a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the NCK1 gene.



NCK1 Antibody (N-term) (Cat. #AP13726a)immunohistochemistry analysis in formalin fixed and paraffin embedded human breast carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of NCK1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.