

NCK1 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1712a

Product Information

Application WB, IHC, FC, E

Primary Accession P16333

Reactivity Human, Monkey

Host Mouse **Clonality** Monoclonal

Clone Names 5B7 Isotype IgG1 Calculated MW 42864

Description 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.

Immunogen Purified recombinant fragment of human NCK1 expressed in E. Coli.

Formulation Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID 4690

Other Names Cytoplasmic protein NCK1, NCK adaptor protein 1, Nck-1, SH2/SH3 adaptor

protein NCK-alpha, NCK1, NCK

Dilution WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 E~~1/1000

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions NCK1 Antibody 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

References

1. Mol Cell Biol. 2008 Mar;28(6):2035-46. 2. Cell Signal. 2010 May;22(5):848-56.

Images

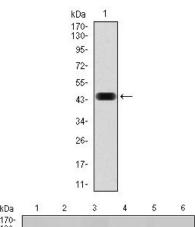


Figure 1: Western blot analysis using NCK1 mAb against human NCK1 (AA: 203-371) recombinant protein. (Expected MW is 44.9 kDa)

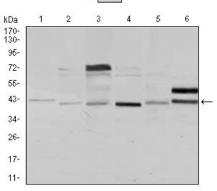


Figure 2: Western blot analysis using NCK1 mouse mAb against Jurkat (1), HeLa (2), HEK293 (3), A431 (4), K562 (5), and COS7 (6) cell lysate.

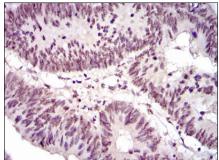
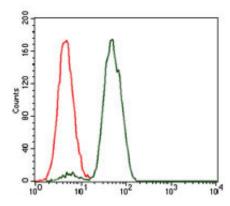


Figure 3: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using NCK1 mouse mAb with DAB staining.

Figure 4: Flow cytometric analysis of Jurkat cells using NCK1 mouse mAb (green) and negative control (red).



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