

# NCK1 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1712a

# **Product Information**

Application Primary Accession Reactivity Host Clonality Clone Names Isotype Calculated MW Description	<ul> <li>WB, IHC, FC, E</li> <li>P16333</li> <li>Human, Monkey</li> <li>Mouse</li> <li>Monoclonal</li> <li>5B7</li> <li>IgG1</li> <li>42864</li> <li>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.</li> </ul>
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~~1/10000
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

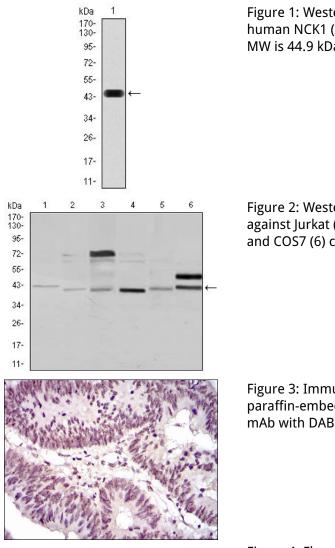
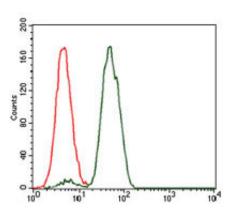


Figure 1: Western blot analysis using NCK1 mAb against human NCK1 (AA: 203-371) recombinant protein. (Expected MW is 44.9 kDa)

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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