

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human NCK1 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 714506
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human NCK1 Met1-Ser377 Accession # P16333
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

NCK1 (Non-catalytic region of tyrosine kinase 1; also Sh2/SH3 adaptor protein NCK-α) is a 46-48 kDa member of the Nck family of adaptor proteins. NCK1 is ubiquitously expressed and may be found in both cytoplasm and nucleus. In the cytoplasm, it connects tyrosine kinases to actin reorganization which, in T cells, involves SLP-76 and VAV1. Upon DNA damage, NCK1 binds SOCS7 and is translocated into the nucleus where it participates in p53 phosphorylation and cell cycle arrest. Human NCK1 is 377 amino acids (aa) in length. It contains three N-terminal SH3 domains (aa 2-252) that mediate binding to Pro-rich regions of cytoplasmic proteins, and a C-terminal SH2 domain (aa 282-376) that binds to phosphorylated proteins or receptors. There are at least three utilized Ser, and one utilized Tyr phosphorylation sites. There are also three potential splice variants. One shows a 12 aa substitution for aa 1-76, a second possesses an 11 aa substitution for aa 77-377, and a third contains a 37 aa substitution for aa 134-377. Full-length NCK1 shares 99% aa identity with mouse NCK1.

MAB7008 detects mouse and rat NCK1 in Western Blots. Cross-reactivity with mouse and rat samples in immunocytochemistry has not been tested.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.