



Rabbit Anti-NCK adaptor protein 1/2 antibody

SL7377R

Product Name:	NCK adaptor protein 1/2
Chinese Name:	NCK衔接蛋白1/2抗体
Alias:	Nck 1/2; NCK adaptor protein 1 + 2 GRB4; melanoma NCK protein; MGC12668; NCK; NCK adaptor protein 1; NCK adaptor protein 2; NCK tyrosine kinase; NCKalpha; NCKbeta; NCK1_HUMAN;NCK12_HUMAN; non catalytic region of tyrosine kinase; noncatalytic region of tyrosine kinase, beta; SH2/SH3 adaptor protein NCK alpha; SH2/SH3 adaptor protein NCK beta
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	43kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human NCK adaptor protein 1/2:2-100/377
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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. [provided by RefSeq, Jun 2010]

Function:

NCK1 is one of the adaptor proteins which mediate specific protein-protein interactions in signaling processes. Adaptor proteins usually contain several domains like SH2 and SH3 which allow specific interactions with other specific proteins. NCK1 and NCK2 show high sequence identity (68%) and have three SH3 domains and a C-terminal SH2 domain. Both of them bind receptor tyrosine kinases such as PDGFR and other tyrosine phosphorylated proteins via their SH2 domains. Various molecules which interact with SH domains of Nck and regulate signaling process of actin cytoskeleton reorganization have been identified. Ncks are thought to have important functions in the development of mesodermal structures during embryogenesis, linked to a role in cell movement and cytoskeletal reorganization. Ncks also have a function in modulating mRNA translation at the level of initiation by interacting eukaryotic initiation factor 2 (eIF2). Under stressed conditions, protein synthesis is reduced by inhibiting the activity of eIF2 through phosphorylation, transiently inhibiting recycling of eIF2 into its active form.

Subcellular 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.

Post-translational modifications:

Phosphorylated on Ser and Tyr residues. Phosphorylated in response to activation of EGFR and FcERI. Phosphorylated by activated PDGFRB.

Similarity:

Contains 1 SH2 domain.
Contains 3 SH3 domains.

SWISS:

O43639 P16333

Gene ID:

4690 ; 8440

Database links:

[Entrez Gene: 4690](#) Human

[Entrez Gene: 8440](#) Human

[Entrez Gene: 17973](#) Mouse

[Entrez Gene: 17974](#) Mouse

[Entrez Gene: 300955](#) Rat

[Entrez Gene: 316369](#) Rat

[Olim: 600508](#) Human

[Olim: 604930](#) Human

[SwissProt: O43639](#) Human

[SwissProt: P16333](#) Human

[SwissProt: Q8BQ28](#) Mouse

[SwissProt: Q99M51](#) Mouse

[SwissProt: B2RZ33](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.