



## Anti-NCK 1 polyclonal antibody (DPAB2688RH)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

| Product Overview                            | Rabbit polyclonal to human Nck 1/2.  |
|---|--|
| Antigen Description                         | NCK1 is one of the adaptor proteins which mediate specific protein-protein interactions in signaling processes. Adaptor proteins usually contain several domains like SH2 (Src homology 2) and SH3 which allow specific interactions with other specific proteins. NCK1 and NCK2 showing high sequence identity (68%) 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. Nck also have a function in modulating mRNA translation at the level of initiation by interacting eukayotic initiation factor 2 (eIF2). Under the stressed conditions, protein synthesis is reduced by inhibiting the activity of eIF2 through the phosphorylation, transiently inhibiting recycling of eIF2 into its active form. |
| Immunogen                                   | Recombinant human protein purified from E.coli (HIS-NCK2).   |
| Isotype                                     | IgG  |
|   |  |
| Source/Host                                 | Rabbit   |
| Source/Host Species Reactivity              | Rabbit Human   |
|   |  |
| Species Reactivity                          | Human  |
| Species Reactivity  Conjugate               | Human Unconjugated   |
| Species Reactivity  Conjugate  Applications | Human Unconjugated WB  |

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| Format        | HEPES with 0.15M NaCl, 0.01% BSA, 0.03% sodium azide, and 50% glycerol. |
|---------------|---|
| Concentration | 1 mg/ml   |
| Size          | 100 μΙ  |
| Preservative  | 0.03% Sodium Azide  |
| Storage       | Store for 1 year at -20 °C from date of shipment.                       |

## **GENE INFORMATION**

| Gene Name           | NCK1 NCK adaptor protein 1 [ Homo sapiens ]  |
|---------------------|--|
| Synonyms            | NCK1; NCK adaptor protein 1; NCK; nck-1; NCK alpha; Nck-1; cytoplasmic protein NCK1; NCK tyrosine kinase; melanoma NCK protein; SH2/SH3 adaptor protein NCK-alpha; non-catalytic region of tyrosine kinase; MGC12668; OTTHUMP00000216478; OTTHUMP00000216479; OTTHUMP00000216492; OTTHUMP00000216498   |
| Entrez Gene ID      | 4690   |
| Protein Refseq      | <u>NP 001177725</u>  |
| UniProt ID          | <u>P16333</u>  |
| Chromosome Location | 3q21   |
| Pathway             | Activation of Rac; Adaptive Immune System; Angiopoietin receptor Tie2-mediated signaling; Arf6 signaling events; Axon guidance; B Cell Receptor Signaling Pathway; DCC mediated attractive signaling; Cell-Cell communication; Developmental Biology; Downstream signal transduction; EGFR1 Signaling Pathway; EPHB forward signaling; ErbB signaling pathway; Generation of second messenger molecules; Immune System |
| Function            | cytoskeletal adaptor activity; protein binding; protein domain specific binding; receptor binding; receptor signaling complex scaffold activity  |