

Product datasheet for **RC200449**

Nck beta (NCK2) (NM_001004720) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nck beta (NCK2) (NM_001004720) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nck beta
Synonyms:	GRB4; NCKbeta
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200449 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACAGAAGAAGTTATTGTGATAGCCAAGTGGGACTACACCGCCAGCAGGACCAGGAGCTGGACATCA
AGAAGAACGAGCGGCTGTGGTTGCTGGACGACTCCAAGACGTGGTGGCGGGTGAAGAACGCGCCAAACAG
GACGGGCTATGTACCGTCCAACACGTGGAGCGGAAGAAGACAGCCTGAAGAAGGGCTCCCTCGTGAAGAAC
CTGAAGGACACACTAGGCCTCGCAAGACGCGCAGGAAGACCAGCGCGGGATGCGTCCCCACGCCCA
GCACGGACGCGGAGTACCCCGCAATGGCAGCGCGCCGACCGCATCTACGACCTCAACATCCCGGCCTT
CGTCAAGTTCGCCTATGTGGCCGAGCGGGAGGATGAGTTGTCCTGGTGAAGGGTGCAGCGTACCGCTC
ATGGAGAAGTGCAGCGACGGTTGGTGGCGGGCAGCTACAACGGGCAGATCGGCTGGTCCCTCCAAC
ACGTCTTGAGGAGGTGGACGAGGCGGCTGCGGAGTCCCCAAGCTTCTGAGCCTGCGCAAGGGCGCCTC
GCTGAGCAATGGCCAGGGCTCCCGCGTGTGCATGTGGTCCAGACGCTGTACCCCTCAGCTCAGTCACC
GAGGAGGAGCTCAACTTCGAGAAGGGGGAGACCATGGAGGTGATTGAGAAGCCGGAGAACGACCCCGAGT
GGTGGAAATGCAAAAATGCCCGGGCCAGGTGGCCTCGTCCCCAAAACTACGTGGTGGTCCCTCAGTGA
CGGGCTGCCCTGCACCTGCGCACGCCACAGATAAGCTACACCGGGCCCTCGTCCAGCGGGCGCTTC
CGGGCAGAGAGTGGTACTACGGAACTGACCGCGCACCGAGTCCGAGTCCGAGTCCGAGCGGGGCG
TGGAGGGCGACTTCTCATTAGGGACAGCGAGTCTCGCCAGCGACTTCTCCGTGTCCCTTAAAGCGTC
AGGGAAGAACAACAACACTTCAAGGTGCAGCTCGTGGACAATGTCTACTGCATTGGGAGCGGCGCTTCCAC
ACCATGGACGAGCTGGTGAACACTACAAAAGGCGCCATCTTACCAGCGAGCACGGGAGAAGCTCT
ACCTCGTCAGGGCCCTGCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC200449 protein sequence
Red=Cloning site Green=Tags(s)

MTEEVIVIAKWDYTAQQDQELDIIKKNERLWLLDDSKTWWRVNRNAANRTGYVPSNYVERKNSLKKGSLVKN
 LKDTLGLGKTRRKSARDASPTPSTDAEYPANGSGADRIYDLNIPAFVKFAYVAEREDEL SLVKGSRVTV
 MEKCSDGWWRGSYNGQIGWFP SNVYLEEVDEAAAESPFLSLRKGASLSNGQGSRLHVVTLYPFSSVT
 EEELNFEKGETMEVIEKPENDPEWVKCKNARGQVGLVPKNYVVVLS DGPALHPAHAPQISYTG PSSSGRF
 AGREWYYGNVTRHQAEALNERGVEGDFLIRDSESSPSDFSVSLKASGKNKHKVQLVDNVYICIGQRRFH
 TMDLVEHYKKAPIFTSEHGKLYLVRALQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6396_b04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_001004720

ORF Size: 1140 bp

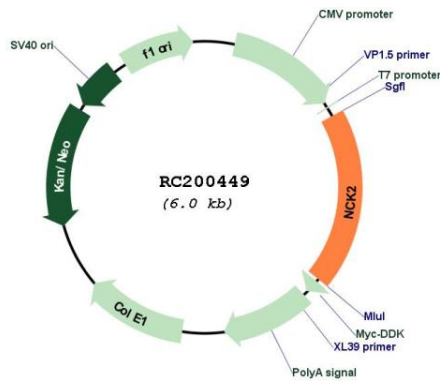
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

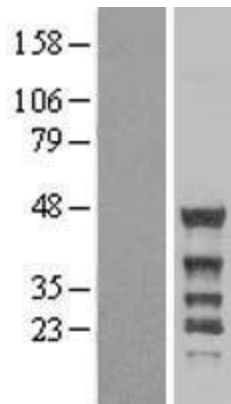
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001004720.3
RefSeq Size:	2417 bp
RefSeq ORF:	1143 bp
Locus ID:	8440
UniProt ID:	O43639
Cytogenetics:	2q12.2
Protein Families:	Druggable Genome
Protein Pathways:	Axon guidance, ErbB signaling pathway, Pathogenic Escherichia coli infection, T cell receptor signaling pathway
MW:	42.9 kDa
Gene Summary:	This gene encodes a member of the NCK family of adaptor proteins. The protein contains three SH3 domains and one SH2 domain. The protein has no known catalytic function but has been shown to bind and recruit various proteins involved in the regulation of receptor protein tyrosine kinases. It is through these regulatory activities that this protein is believed to be involved in cytoskeletal reorganization. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]

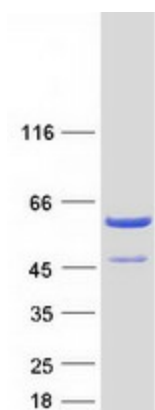
Product images:



Circular map for RC200449



Western blot validation of overexpression lysate (Cat# [LY423904]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200449 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NCK2 protein (Cat# [TP300449]). The protein was produced from HEK293T cells transfected with NCK2 cDNA clone (Cat# RC200449) using MegaTran 2.0 (Cat# [TT210002]).