

## Product datasheet for RC202557

## Nck beta (NCK2) (NM 003581) Human Tagged ORF Clone

**Product data:** 

**Product Type: Expression Plasmids** 

**Product Name:** Nck beta (NCK2) (NM\_003581) Human Tagged ORF Clone

Tag: Myc-DDK Symbol: Nck beta

Synonyms: GRB4; NCKbeta

**Mammalian Cell** 

Selection:

Neomycin

pCMV6-Entry (PS100001) Vector: E. coli Selection: Kanamycin (25 ug/mL) **ORF Nucleotide** >RC202557 ORF sequence

Red=Cloning site Blue=ORF Green=Tags(s) Sequence:

> TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC

> ATGACAGAAGAAGTTATTGTGATAGCCAAGTGGGACTACACCGCCCAGCAGGACCAGGAGCTGGACATCA AGAAGAACGAGCGGCTGTGGTTGCTGGACGACTCCAAGACGTGGTGGCGGGTGAGGAACGCGGCCAACAG GACGGGCTATGTACCGTCCAACTACGTGGAGCGGAAGAACAGCCTGAAGAAGGGGCTCCCTCGTGAAGAAC CTGAAGGACACACTAGGCCTCGGCAAGACGCGCAGGAAGACCAGCGCGCGGGATGCGTCCCCCACGCCCA GCACGGACGCCGAGTACCCCGCCAATGGCAGCGGCGCCGACCGCATCTACGACCTCAACATCCCGGCCTT CGTCAAGTTCGCCTATGTGGCCGAGCGGGAGGATGAGTTGTCCCTGGTGAAGGGGTCGCGCGTCACCGTC ATGGAGAAGTGCAGCGACGGTTGGTGGCGGGGCAGCTACAACGGGCAGATCGGCTGGTTCCCCTCCAACT ACGTCTTGGAGGAGGTGGACGAGGCGGCTGCGGAGTCCCCAAGCTTCCTGAGCCTGCGCAAGGGCGCCTC GCTGAGCAATGGCCAGGGCTCCCGCGTGCTGCATGTGGTCCAGACGCTGTACCCCTTCAGCTCAGTCACC GAGGAGGAGCTCAACTTCGAGAAGGGGGAGACCATGGAGGTGATTGAGAAGCCGGAGAACGACCCCGAGT GGTGGAAATGCAAAAATGCCCGGGGCCAGGTGGGCCTCGTCCCCAAAAACTACGTGGTGGTCCTCAGTGA CGGGCCTGCCCTGCACCCTGCGCACGCCCCACAGATAAGCTACACCGGGCCCTCGTCCAGCGGGCGCTTC GCGGGCAGAGAGTGGTACTACGGGAACGTGACGCGGCACCAGGCCGAGTGCGCCCTCAACGAGCGGGGCG TGGAGGGCGACTTCCTCATTAGGGACAGCGAGTCCTCGCCCAGCGACTTCTCCGTGTCCCTTAAAGCGTC AGGGAAGAACAAACACTTCAAGGTGCAGCTCGTGGACAATGTCTACTGCATTGGGCAGCGGCGCTTCCAC ACCATGGACGAGCTGGTGGAACACTACAAAAAGGCGCCCATCTTCACCAGCGAGCACGGGGAGAAGCTCT ACCTCGTCAGGGCCCTGCAG

> **ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



**Protein Sequence:** >RC202557 protein sequence

Red=Cloning site Green=Tags(s)

MTEEVIVIAKWDYTAQQDQELDIKKNERLWLLDDSKTWWRVRNAANRTGYVPSNYVERKNSLKKGSLVKN LKDTLGLGKTRRKTSARDASPTPSTDAEYPANGSGADRIYDLNIPAFVKFAYVAEREDELSLVKGSRVTV MEKCSDGWWRGSYNGQIGWFPSNYVLEEVDEAAAESPSFLSLRKGASLSNGQGSRVLHVVQTLYPFSSVT EEELNFEKGETMEVIEKPENDPEWWKCKNARGQVGLVPKNYVVVLSDGPALHPAHAPQISYTGPSSSGRF AGREWYYGNVTRHQAECALNERGVEGDFLIRDSESSPSDFSVSLKASGKNKHFKVQLVDNVYCIGQRRFH TMDELVEHYKKAPIFTSEHGEKLYLVRALQ

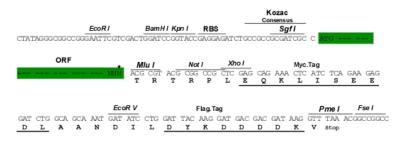
**TRTRPL**EQKLISEEDLAANDILDYKDDDDK**V** 

**Chromatograms:** https://cdn.origene.com/chromatograms/mk6151\_e07.zip

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme:





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_003581

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:** 

- 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.

**RefSeq:** <u>NM 003581.5</u>

RefSeq Size: 2517 bp
RefSeq ORF: 1143 bp
Locus ID: 8440
UniProt ID: O43639
Cytogenetics: 2q12.2
Domains: SH2, SH3

**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

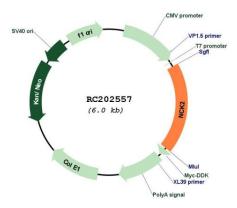
three SH3 domains and one SH2 domain. The protein has no known catalytic function but has

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

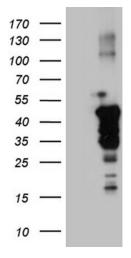
to be involved in cytoskeletal reorganization. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]



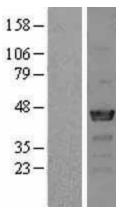
## **Product images:**

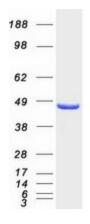


Circular map for RC202557



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NCK2 (Cat# RC202557, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-NCK2(Cat# [TA811057]). Positive lysates [LY401190] (100ug) and [LC401190] (20ug) can be purchased separately from OriGene.





Western blot validation of overexpression lysate (Cat# [LY401190]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202557 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified NCK2 protein (Cat# [TP302557]). The protein was produced from HEK293T cells transfected with NCK2 cDNA clone (Cat# RC202557) using MegaTran 2.0 (Cat# [TT210002]).