

Product datasheet for **RC200402**

14-3-3 beta (YWHAB) (NM_139323) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	14-3-3 beta (YWHAB) (NM_139323) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	14-3-3 beta
Synonyms:	GW128; HEL-S-1; HS1; KCIP-1; YWHAA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200402 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACAATGGATAAAAGTGAGCTGGTACAGAAAGCCAACTCGCTGAGCAGGCTGAGCGATATGATGATA
TGGCTGCAGCCATGAAGGCAGTCACAGAACAGGGGCATGAACTCTCCAACGAAGAGAGAAATCTGCTCTC
TGTTGCCATAAGAATGTGGTAGGCGCCCGCCGCTCTTCTGGCGTGTCATCTCCAGCATTGAGCAGAAA
ACAGAGAGGAATGAGAAGAAGCAGCAGATGGGCAAAGAGTACCGTGAGAAGATAGAGGCAGAACTGCAGG
ACATCTGCAATGATGTTCTGGAGCTGTTGGACAAATATCTTATTCCAATGCTACACAACCAGAAAGTAA
GGTGTCTACTTGAAAATGAAAGGAGATTATTTTAGGTATCTTTCTGAAGTGGCATCTGGAGACAACAAA
CAAACCACTGTGTCGAACTCCCAGCAGGCTTACCAGGAAGCATTGAAATTAGTAAGAAAGAAATGCAGC
CTACACACCCAATTCGTCTTGGTCTGGCACTAAATTTCTCAGTCTTTACTATGAGATTCTAAACTCTCC
TGAAAAGGCTGTAGCCTGGCAAAAACGGCATTGATGAAGCAATTGCTGAATTGGATACGCTGAATGAA
GAGTCTTATAAAGACAGCACTCTGATCATGCAGTTACTTAGGGACAATCTCACTCTGTGGACATCGGAAA
ACCAGGGAGACGAAGGAGACGCTGGGGAGGGAGAGAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC200402 protein sequence
 Red=Cloning site Green=Tags(s)

MTMDKSELVQKAKLAEQAERYDDMAAMKAVTEQGHLSNEERNLLSVAYKNVVGARRSSWRVISSIEQK
 TERNEKKQQMGKEYREKIEAELQDICNDVLELLDKYLIPNATQPESKVFYLMKMGDYFRYLSEVASGDNK
 QTTVSNSQQAYQEAFEISKKEMQPTHPIRLGLALNFSVFYYEILNSPEKACSLAKTAFDEAIAELDTLNE
 ESYKDSTLIMQLLRDNLTLWTSENQGDGEGEN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6057_g02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_139323

ORF Size: 738 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: [NM_139323.4](#)

RefSeq Size: 3136 bp

RefSeq ORF: 741 bp

Locus ID: 7529

UniProt ID: [P31946](#)

Cytogenetics: 20q13.12

Domains: 14-3-3

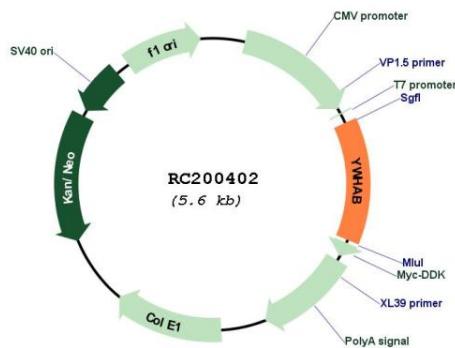
Protein Families: Druggable Genome

Protein Pathways: Cell cycle, Neurotrophin signaling pathway, Oocyte meiosis

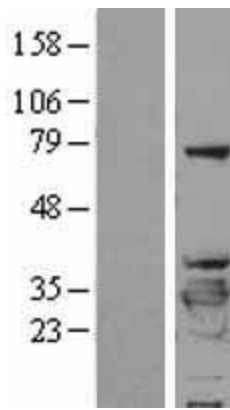
MW: 28.1 kDa

Gene Summary: This gene encodes a protein belonging to the 14-3-3 family of proteins, members of which mediate signal transduction by binding to phosphoserine-containing proteins. This highly conserved protein family is found in both plants and mammals. The encoded protein has been shown to interact with RAF1 and CDC25 phosphatases, suggesting that it may play a role in linking mitogenic signaling and the cell cycle machinery. Two transcript variants, which encode the same protein, have been identified for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC200402



Western blot validation of overexpression lysate (Cat# [LY403387]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200402 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified YWHAB protein (Cat# [TP300402]). The protein was produced from HEK293T cells transfected with YWHAB cDNA clone (Cat# RC200402) using MegaTran 2.0 (Cat# [TT210002]).