

## Product datasheet for **RC227049**

### 14-3-3 zeta (YWHAZ) (NM\_001135702) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	14-3-3 zeta (YWHAZ) (NM_001135702) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	14-3-3 zeta
Synonyms:	14-3-3-zeta; HEL-S-3; HEL-S-93; HEL4; KCIP-1; POPCHAS; YWHAD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC227049 representing NM_001135702 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGATAAAAATGAGCTGGTTCAGAAGGCCAACTGGCCGAGCAGGCTGAGCGATATGATGACATGGCAG  
CCTGCATGAAGTCTGTAAGTCTGAGCAAGGAGCTGAATTATCCAATGAGGAGAGGAATCTTCTCTCAGTTGC  
TTATAAAAATGTTGTAGGAGCCCGTAGGTCATCTTGGAGGGTCGCTCAAGTATTGAACAAAAGACGGAA  
GGTGCTGAGAAAAACAGCAGATGGCTCGAGAATACAGAGAGAAAATTGAGACGGAGCTAAGAGATATCT  
GCAATGATGTACTGTCTCTTTGGAAAAGTTCTTGATCCCAATGCTTACAAGCAGAGAGCAAAGTCTT  
CTATTTGAAAATGAAAGGAGATTACTACGTTACTTGGCTGAGGTTGCCGCTGGTATGACAAGAAAGGG  
ATTGTCGATCAGTCACAACAAGCATACCAAGAAGCTTTTAAAATCAGCAAAAAGGAAATGCAACCAACAC  
ATCCTATCAGACTGGGTCTGGCCCTTAACCTTCTGTGTTCTATTATGAGATTCTGAACTCCCCAGAGAA  
AGCCTGCTCTCTTGCAAAGACAGCTTTTGTGAAGCCATTGCTGAACTTGATACATTAAGTGAAGAGTCA  
TACAAAGACAGCAGCTAATAATGCAATTACTGAGAGACAACCTTGACATTGTGGACATCGGATACCCAAG  
GAGACGAAGCTGAAGCAGGAGAAGGAGGGGAAAAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC227049 representing NM\_001135702  
Red=Cloning site Green=Tags(s)

MDKNELVQKAKLAEQAERYDDMAACMKSVTEQGAELSNEERNLLSVAYKNVVGARRSSWRVSSIEQKTE  
 GAEKKQQMAREYREKIETELRDICNDVLSLLEKFLIPNASQAESKVFYLMKMGDYRYLAEVAAGDDKKG  
 IVDQSQQAYQEAFEISKEMQPTHPIRLGLALNFSVFYYEILNSPEKACSLAKTAFDEAIAELDTLSEES  
 YKDSTLIMQLLRDNLTLWTSDTQGDEAEAGEGGEN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2605\\_f05.zip](https://cdn.origene.com/chromatograms/mg2605_f05.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\_001135702

**ORF Size:** 735 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\\_001135702.2](#)

**RefSeq ORF:** 738 bp

**Locus ID:** 7534

**UniProt ID:** [P63104](#)

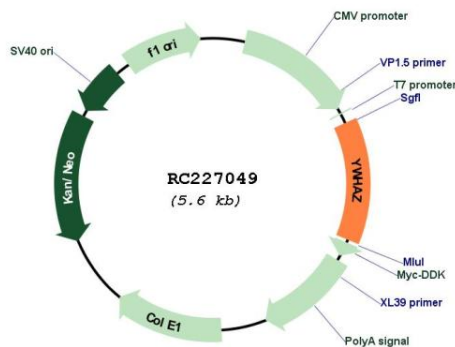
**Cytogenetics:** 8q22.3

**Protein Pathways:** Cell cycle, Neurotrophin signaling pathway, Oocyte meiosis, Pathogenic Escherichia coli infection

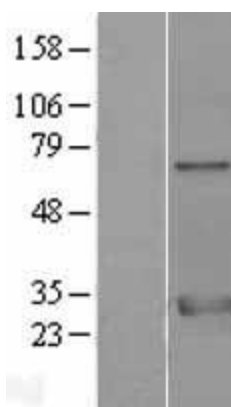
**MW:** 27.6 kDa

**Gene Summary:** This gene product belongs to the 14-3-3 family of proteins which mediate signal transduction by binding to phosphoserine-containing proteins. This highly conserved protein family is found in both plants and mammals, and this protein is 99% identical to the mouse, rat and sheep orthologs. The encoded protein interacts with IRS1 protein, suggesting a role in regulating insulin sensitivity. Several transcript variants that differ in the 5' UTR but that encode the same protein have been identified for this gene. [provided by RefSeq, Oct 2008]

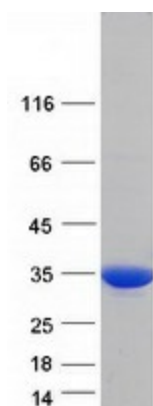
**Product images:**



Circular map for RC227049



Western blot validation of overexpression lysate (Cat# [LY427676]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC227049 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified YWHAZ protein (Cat# [TP327049]). The protein was produced from HEK293T cells transfected with YWHAZ cDNA clone (Cat# RC227049) using MegaTran 2.0 (Cat# [TT210002]).