

Product datasheet for RC209909

OriGene Technologies, Inc.

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14-3-3 zeta (YWHAZ) (NM_003406) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: 14-3-3 zeta (YWHAZ) (NM_003406) 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 >RC209909 representing NM_003406

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

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC}$

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA





Protein Sequence: >RC209909 representing NM_003406

Red=Cloning site Green=Tags(s)

MDKNELVQKAKLAEQAERYDDMAACMKSVTEQGAELSNEERNLLSVAYKNVVGARRSSWRVVSSIEQKTE GAEKKQQMAREYREKIETELRDICNDVLSLLEKFLIPNASQAESKVFYLKMKGDYYRYLAEVAAGDDKKG IVDQSQQAYQEAFEISKKEMQPTHPIRLGLALNFSVFYYEILNSPEKACSLAKTAFDEAIAELDTLSEES YKDSTLIMQLLRDNLTLWTSDTQGDEAEAGEGGEN

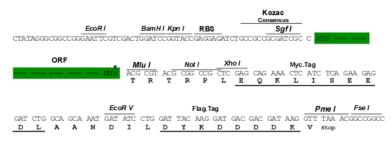
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2605 f05.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_003406

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: <u>NM 003406.4</u>

RefSeq Size: 2834 bp

 RefSeq ORF:
 738 bp

 Locus ID:
 7534

 UniProt ID:
 P63104

 Cytogenetics:
 8q22.3

 Domains:
 14-3-3

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

infection

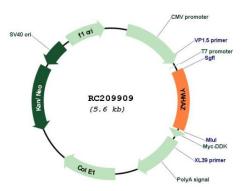
MW: 27.6 kDa

Gene Summary: This gene product belongs to the 14-3-3 family of proteins which mediate signal transduction

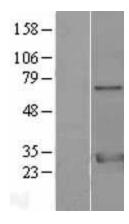
by binding to phosphoserine-containing proteins. This highly conserved protein family is found in both plants and mammals, and this protein is 99% identical to the mouse, rat and sheep orthologs. The encoded protein interacts with IRS1 protein, suggesting a role in regulating insulin sensitivity. Several 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:

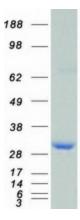


Circular map for RC209909



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# [TP309909]). The protein was produced from HEK293T cells transfected with YWHAZ cDNA clone (Cat# RC209909) using MegaTran 2.0 (Cat# [TT210002]).