

## Product datasheet for **RR209349**

### Zfand2b (NM\_001025745) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Zfand2b (NM_001025745) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Zfand2b
Synonyms:	RGD1306260
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RR209349 representing NM_001025745 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**C

ATGGAGTTTCCGGACCTCGGGGCTCACTGTTCCGAGCCGAGCTGTCAGCGCTTGGATTTTTTGGCACTCA  
AATGCGATGCCTGCTCCGGCATCTTCTGCGCAGACCATGTGGCTACGCCCATCATCACTGTGGATCAGC  
TTACAAAAGGATATCCAGGTACCTGTGTGCCGCTCTGTAATGTGCTGTGCCGTAGCCAGAGGGGAG  
CCTCTGACCGGGCCGTAGGAGAGCATATTGACAGAGACTGTCGCTCTGATCCGGCAGCAAAAACGCA  
AGATCTTCACCAATAAGTGTGAACGATCTGGCTGCCGGCAGCAGAGATGATGAACTGACTTGTGACCG  
CTGTGGCCGAAATTTCTGCATCAAGCACCGTCACCCACTGGACCATGATTGCTCTGGTGAAGGTATCCG  
ACCAGCCGGGCAGGGCTTGTCTATCTCCAGAGCACAAGGTCTGGCTTCTACAAGCACTGTCCCAAGTC  
CAAGTCGGACCTTGCTTCGTCATCCTCCCCAGCAGAGCCACACCCAGCTTCCACCCAGGACAACCTC  
TCCAGTTATTGCTTTCAGAAATGGCTTGAGTGAGGACGAGGCCCTGCAGCGTGCCCTGGAATATCCCTT  
GCGGAGGCTAAACCCAGATCCCAAGTTCTCAAGAGGAAGAAGACCTGGCGTTAGCACAGGCGCTGTGAG  
CCAGTGAGGCAGAGTACCAACAGCAGCAGGCGCAGAGCCGTAGCTTGAAGCCGTCCAACCTGCAGCCTGTG  
C

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RR209349 representing NM\_001025745

Red=Cloning site Green=Tags(s)

MEFPDLGAHCSESPCQRLDFLPLKCDACSGIFCADHVAYAHHCHGSAYQKDIQVPVCLCNVPVPVARGE  
PPDRAVGEHIDRDCRSDPAQQKRKIFTNKCERSGCRQREMMKLTCDRGRNFCIKHRHPLDHDCSGEGHP  
TSRAGLAAISRAQGLASTSTVPSPSRTLPSSSPSRATPQLPPTTSPVIALQNLSEDEALQRALELSL  
AEAKPOIPSSOEEDLALAQALSAEAEY0000A0SRSLKPSNCSLC

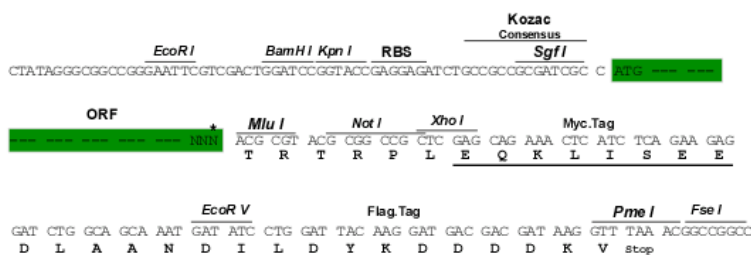
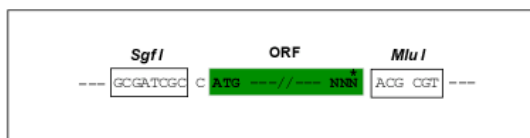
TRTRPLEOKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

### Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

ACCN: NM 001025745

ORF Size: 771 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\\_001025745.1](#), [NP\\_001020916.1](#)

**RefSeq Size:** 1320 bp

**RefSeq ORF:** 774 bp

**Locus ID:** 363253

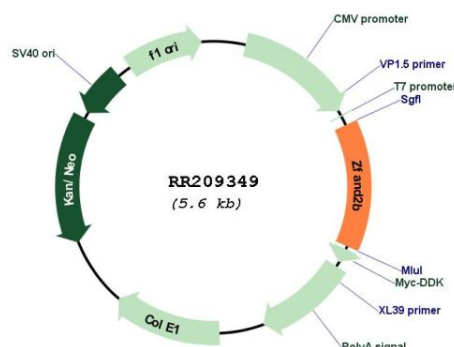
**UniProt ID:** [Q4KLG9](#)

**Cytogenetics:** 9q33

**MW:** 27.9 kDa

**Gene Summary:** Plays a role in protein homeostasis by regulating both the translocation and the ubiquitin-mediated proteasomal degradation of nascent proteins at the endoplasmic reticulum. It is involved in the regulation of signal-mediated translocation of proteins into the endoplasmic reticulum. It also plays a role in the ubiquitin-mediated proteasomal degradation of proteins for which signal-mediated translocation to the endoplasmic reticulum has failed. May therefore function in the endoplasmic reticulum stress-induced pre-emptive quality control, a mechanism that selectively attenuates the translocation of newly synthesized proteins into the endoplasmic reticulum and reroutes them to the cytosol for proteasomal degradation. By controlling the steady-state expression of the IGF1R receptor, indirectly regulates the insulin-like growth factor receptor signaling pathway.[UniProtKB/Swiss-Prot Function]

## Product images:



Circular map for RR209349