

Product datasheet for **RC239309**

ZBTB48 (NM_001278648) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	ZBTB48
Synonyms:	HKR3; pp9964; TZAP; ZNF855
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



ORF Nucleotide Sequence: >RC239309 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGACGGCTCCTTCGTCAGCACAGTGTGAGGGTCTGCAGGAGCTCAACAAGCAGCGGAGAAGGGCC
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ACGCGTACGCGGCCGTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239309 protein sequence
 Red=Cloning site Green=Tags(s)

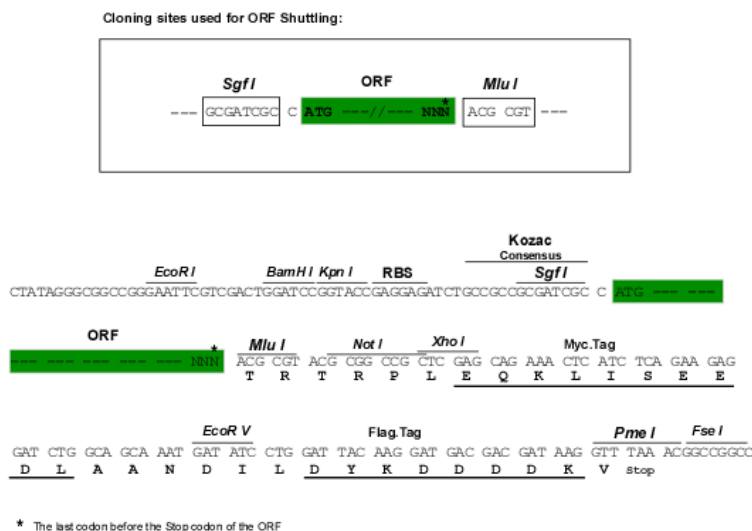
MDGSFVQHSVRVLQELNKQREKQYCDATLDVGGLVFKAHWSVLACCSHFFQSLYGDGSGGSVVLPAGFA
 EIFGLLLDFFYTGHLLTSGNRDQVLLAARELRVPEAVELCQSFKPKTSVGQAAGGQSGLGPPASQNVNS
 HYKEPAGLEEEVSRITGLVPRDQEPGRSHSPQRPQLHSPAQSEGPSSLGKLLKQALKPCPLEDKKPEDC
 KYPFRPLEAEGAQLQGSNEWVQVEDDGDGDMSEPEAVL TRRKSINVIRKPCAEPAL SAGSLAAEP
 AENRKGTAVPVECPCHKKFLSKYYLKVHNRKHTGEKPFCEPKCGKCYFRKENLLEHEARNCMNRSEQVF
 TCSVCQETFRMRMELRVHMSHTGEMPYKSSCSQQFMQKKDLQSHMIKLHGAPKPHACPTCAKCFLSRT
 ELQLHEAFKHRGEKLFVCEECGHRASSRNLQMHIAKAKHRNERPHVCEFCSHAFTQKANLNMHLRTHTGE
 KPFQCHLCGKTRTQASLDKHNRTHTGERPFSCEFCEQRFTEKGPLL RHVASRHHQEGRPHFQCICGKTFK
 AVEQLRVHRRHKGVKFEKTECGYKTRQAHLLRRHMEIHDRVENYNPRQRKLRNLIIEDEKMMVVALLQP
 PAELEVGSAAEVIVESLAQGLASQLPGQRLCAEESFTGPGVLEPSLIITAAPVEDCDT

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mq3159_q07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001278648

ORF Size: 2064 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:

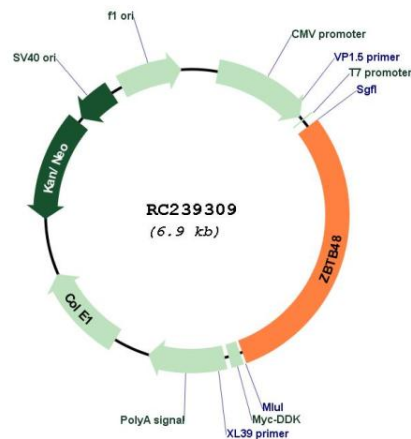
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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_001278648.2</u>
RefSeq Size:	2299 bp
RefSeq ORF:	2067 bp
Locus ID:	3104
UniProt ID:	<u>P10074</u>
Cytogenetics:	1p36.31
Protein Families:	Transcription Factors
MW:	77.1 kDa

Gene Summary: Telomere-binding protein that acts as a regulator of telomere length (PubMed:28500257, PubMed:28082411). Directly binds the telomeric double-stranded 5'-TTAGGG-3' repeat (PubMed:28500257, PubMed:28082411). Preferentially binds to telomeres that have a low concentration of shelterin complex and acts as a regulator of telomere length by initiating telomere trimming, a process that prevents the accumulation of aberrantly long telomeres (PubMed:28082411). Also acts as a transcription regulator that binds to promoter regions (PubMed:7969177, PubMed:24382891, PubMed:28500257). Regulates expression of a small subset of genes, including MTFPI (PubMed:28500257). Regulates expression the J and/or S elements in MHC II promoter (PubMed:7969177). Acts as a negative regulator of cell proliferation by specifically activating expression of ARF, a tumor suppressor isoform of CDKN2A (PubMed:24382891).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC239309