

## Product datasheet for **RC206745**

### Plzf (ZBTB16) (NM\_006006) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Plzf (ZBTB16) (NM_006006) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ZBTB16
Synonyms:	PLZF; ZNF145
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide  
Sequence:

>RC206745 representing NM\_006006  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGATCTGACAAAAATGGGCATGATCCAGCTGCAGAACCTAGCCACCCACGGGGCTACTGTCAAGG  
 CCAACCAGATGCGGCTGGCCGGGACTTTGTGCGATGTGGTCATCATGGTGACAGCCAGGAGTTCCACGC  
 CCACCGGACGGTCTGGCCTGCACCAGCAAGATGTTTGAGATCCTCTCCACCGCAATAGTCAACTAT  
 ACTTTGGACTTCTCTCGCCAAAGACCTTCAGCAGATTCTGGAGTATGCATATACAGCCACGCTGCAAG  
 CCAAGGCGGAGGACCTGGATGACCTGCTGTATGCGGCCGAGATCCTGGAGATCGAGTACCTGGAGGAACA  
 GTGCTGAAGATGCTGGAGACCTCCAGGCCTCAGACGACAATGACACGGAGGCCACCATGGCCGATGGC  
 GGGGCCGAGGAAGAAGAGGACCGCAAGGCTCGGTACCTCAAGAACATCTCATCTCGAAGCATTCCAGCG  
 AGGAGAGTGGGTATGCCAGTGTGGCTGGACAGAGCCTCCCTGGGCCATGGTGGACCAGAGCCCTTCAGT  
 CTCACCTTCATTTGGTCTTTCAGCCATGAGTCCCACCAAGGCTGCAGTGGACAGTTTGATGACCATAGGA  
 CAGTCTCTCCTGCAGGGAACCTTCAGCCACCTGCAGGGCCCGAGGAGCCAACTCTGGCTGGGGGTGGGC  
 GGCACCTTGGGGTGGCTGAGGTGAAGACGGAGATGATGCAGGTGGATGAGGTGCCAGCCAGGACAGCCC  
 TGGGGCAGCCGAGTCCAGCATCTCAGGAGGGATGGGGGACAAGTTGAGGAAAGAGGCAAAGAGGGGCT  
 GGGACCCCGACTCGAAGCAGCGTCATCACCAGTGTAGGGAGCTACACTATGGGCGAGAGGAGAGTGCCG  
 AGCAGGTGCCACCCCGACTGAGGCTGGCCAGGCCCCCACTGGCCGACCTGAGCACCAGCACCCTCCG  
 TGAGAAGCATCTGGGCATCTACTCCGTGTTGCCAACCACAAGGCTGACGCTGTATTGAGCATGCCGTCT  
 TCCGTGACCTCTGGCCTCCAGTGCAGCCTGCCCTGGCTGTCTCCATGGACTTCAGCACCTATGGGGGC  
 TGCTGCCCGAGGCTTCATCCAGAGGGAGCTGTTGAGCAAGCTGGGGGAGCTGGCTGTGGCATGAAGTC  
 AGAGAGCCGACCATCGGAGAGCAGTGCAGCGTGTGTGGGTCGAGCTTCTGATAACGAGGCTGTGGAG  
 CAGCACAGGAAGCTGCACAGTGGGATGAAGACGTACGGGTGCGAGCTCTGCGGGAAGCGGTTCTGGATA  
 GTTTGCGGCTGAGAATGCACTTACTGGCTCATTACGCGGGTGCCAAAGCCTTTGTCTGTGATCAGTGCGG  
 TGCACAGTTTTGGAAGGAGGATGCCCTGGAGACACACAGGCAGACCCATACTGGCACTGACATGGCCGTC  
 TTCTGTCTGTGTGGGAAGCGCTTCCAGGCGCAGAGCGCACTGCAGCAGCACATGGAGGTCCACGCGG  
 GCGTGCGCAGCTACATCTGCAGTGAAGTCAACCGCACCTCCCCAGCCACACGGCTCTCAAACGCCACCT  
 GCGCTCACATACAGGCGACCACCCTACGAGTGTGAGTTCTGTGGCAGCTGCTTCCGGGATGAGAGCACA  
 CTAAGAGCCACAACGCATCCACACGGGTGAGAAACCCTACGAGTGCAATGGCTGTGGCAAGAAGTTCA  
 GCCTCAAGCATCAGCTGGAGACGCACTATAGGGTGACACAGGTGAGAAGCCCTTTGAGTGAAGCTCTG  
 CCACCAGCGCTCCCGGACTACTCGGCCATGATCAAGCACCTGAGAACGCACAACGGCGCCTCGCCCTAC  
 CAGTGCACCATCTGCACAGAGTACTGCCCCAGCCTCTCCTCCATGCAGAAGCACATGAAGGGCCACAAGC  
 CCGAGGAGATCCCGCCGACTGGAGGATAGAGAAGACGTACCTCTACCTGTGCTATGTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC206745 representing NM\_006006  
 Red=Cloning site Green=Tags(s)

MDLTKMGIQLQNPSTHTGLLCKANQMRLAGTLCDDVIMVDSQEFHAHRTVLACTSKMFEILFHRNSQHY  
 TLDFLSPKTFQQILEYAYATLQAKAEDLDLLYAAEILEIEYLEEQCLKMLETIQASDDNDTEATMADG  
 GAEEEEERKARYLKNIFISKHSSEESGYASVAGQSLPGPMVDQSPSVSTSFGLSAMSPTKAAVDSLMTIG  
 QSLLQGTLQPPAGPEEPTLAGGRRHPGVAEVKTEMMQVDEVPSSQDSPGAAESSISGGMGDKVEERGKEGP  
 GTPTRSSVITSARELHYGREESAQVPPPAEQAPTGRPEHPAPPPEKHLGIYSVLPNHKADAVLSMPS  
 SVTSGLVHPALAVSMDYSTYGGLLPQGFIQRELF SKLGELAVGMKSESRTIGEQCVCVGVLPDNEAVE  
 QHRKLHSGMKTYGCELCGKRFLLSLRRLRMHLAHSAGAKAFVCDQCGAQFSKEDALETHRQTHGTDMAV  
 FCLLCGKRFQAQSALQQHMEVHAGVRSYICSECNRTFPSHTALKRHLRSHTGDHPYECFCGSCFRDEST  
 LKSHKRIHTGEKPYECNGCGKKFSLKHQLETHYRVHTGEKPFECKLCHQSRDYSAMIKHLRTHNGASPY  
 QCTICTEYCPSSLSSMQKHMKGHKPEEIPPDWRIEKTYLYLCYV

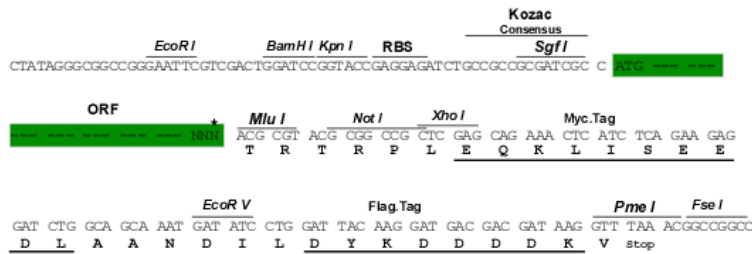
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mg3816\\_b01.zip](https://cdn.origene.com/chromatograms/mg3816_b01.zip)

Restriction Sites: SgfI-MluI

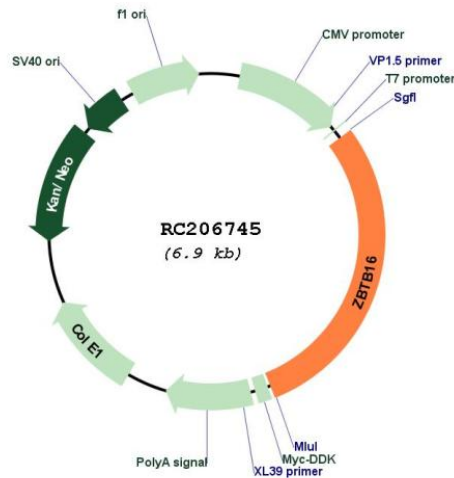
Cloning Scheme:

Cloning sites used for ORF Shuttling:



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

Plasmid Map:



ACCN: NM\_006006

ORF Size: 2019 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_006006.6](#)

**RefSeq Size:** 2417 bp

**RefSeq ORF:** 2022 bp

**Locus ID:** 7704

**UniProt ID:** [Q05516](#)

**Cytogenetics:** 11q23.2

**Domains:** BTB, zf-C2H2

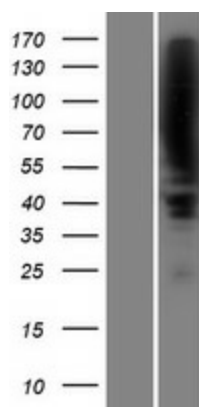
**Protein Families:** Druggable Genome, Transcription Factors

**Protein Pathways:** Acute myeloid leukemia, Pathways in cancer

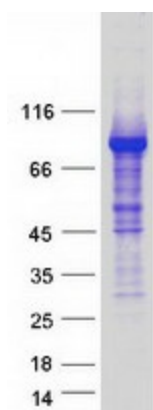
**MW:** 74.1 kDa

**Gene Summary:** This gene is a member of the Krueppel C2H2-type zinc-finger protein family and encodes a zinc finger transcription factor that contains nine Kruppel-type zinc finger domains at the carboxyl terminus. This protein is located in the nucleus, is involved in cell cycle progression, and interacts with a histone deacetylase. Specific instances of aberrant gene rearrangement at this locus have been associated with acute promyelocytic leukemia (APL). Alternate transcriptional splice variants have been characterized. [provided by RefSeq, Jul 2008]

## Product images:



Western blot validation of overexpression lysate (Cat# [LY416930]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206745 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ZBTB16 protein (Cat# [TP306745]). The protein was produced from HEK293T cells transfected with ZBTB16 cDNA clone (Cat# RC206745) using MegaTran 2.0 (Cat# [TT210002]).