

Product datasheet for **RC204643**

TFB1M (NM_016020) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TFB1M (NM_016020) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TFB1M
Synonyms:	CGI-75; CGI75; mtTFB; mtTFB1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204643 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGCCTCCGGAAAACCTCAGCACTTGCCGTCTCCCTCCGTTGCCACGATTCGAGAAATCATTAAAGT
TGTTAAGACTGCAAGCAGCGAAGCAGCTATCACAGAATTCCTCCTGGACTTGAGGCTGACAGATAAGAT
TGTAAGGAAAGCTGGCAATCTGACAAATGCTTATGTTTACGAAGTGGCCCTGGCCAGGGGAATCACA
AGATCTATTCTTAATGCCGACGTCGCTGAACTTCTGGTGGTTGAAAAGGACACTCGATTTATTCCTGGAT
TACAGATGCTTTCTGATGCAGCACCTGGGAAACTGAGAATTGTTTCATGGAGATGTCTTGACATTTAAGGT
AGAAAAGGCTTTTTTCAGAAAGTCTTAAAAGACCTGGGAAGATGATCCTCAAATGTACATATTATTGGA
AATCTGCCTTTTAGTGTTTCAACTCCACTGATTATCAAGTGGCTTAAAAATTTCTGTAGAGATGGAC
CTTTTGTTATGGCAGAAGCTCAGATGACTTTGACTTTTCAAAGGAAGTGGCAGAGAGACTTGCAGCCAA
TACAGGAAGCAACAGCGTAGTCGCCTCTCTGTTATGGCTCAGTACCTCTGCAATGTTTCGACACATCTTT
ACGATTCAGGACAAGCTTTTGTCCCAAACCAGAGGTGGACGTGGCGTGGTGCACCTCACTCCCTTGA
TACAGCCCAAGATAGAGCAGCCATTCAAGCTGGTGGAAAAAGTGGTTCAGAATGTATTTCAAGTCCGAA
GAAACTGTCATCGAGGGCTCAGAATGTTATTCCTGAAGCGCAGCGCTTGGAAAGCACGGGCAGGCTG
TTAGAGTTGGCAGACATAGACCCTACTCTCGGCCCGCCAGCTCTCCATCTCACACTTTAAGAGCCTCT
GTGATGTATACAGAAAAATGTGTGATGAAGACCCACAACCTTTTGCATATAATTTTCAGAGAAGAACTCAA
GCGAAGAAAAAGCAAAAATGAAGAAAAAGAAGAGGATGACGCAGAGAATTACAGACTC

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC204643 protein sequence
Red=Cloning site Green=Tags(s)

MAASGKLSLCRLPPLPTIREIIKLLRLQAQKLSQNFLDLRLTDKIVRKAGNL TNAYVVEVGPGGGIT
 RSILNADVAELLVVEKDTRFIPGLQMLSDAAPGKLRIVHGDVLT FKVKEAFSESLKRPWEDDPPNVHIIG
 NLPFVSSTPLIIKWLNI SCRDPFVYGRQTMLTFQKEVAERLAANTGSKQRSLSVMAQYLCNVRHIF
 TIPGQAFVPKPEVDVGVVHFTPLIQPKIEQPFKLVKVVQNVFQFRRKYCHRLRMLFPEAQRLESTGRL
 LELADIDPTLRPRLSISHFKSLCDVYRKMCEDEPQLFAYNFREELKRRKSKNEEKEEDDAENYRL

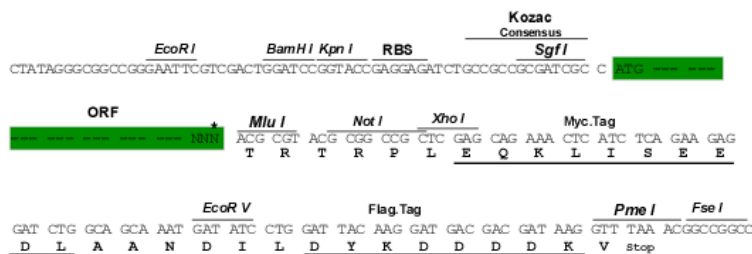
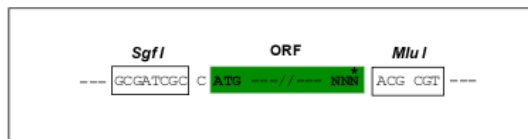
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6068_e10.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_016020

ORF Size: 1038 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_016020.4](#)

RefSeq Size: 2818 bp

RefSeq ORF: 1041 bp

Locus ID: 51106

UniProt ID: [Q8WVM0](#)

Cytogenetics: 6q25.3

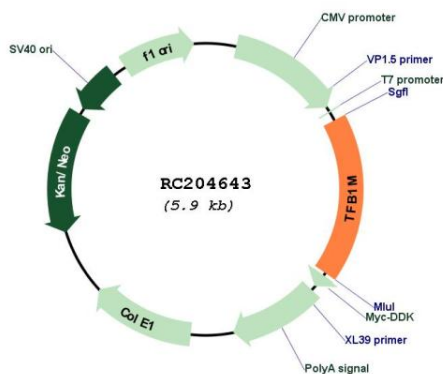
Domains: rADc

Protein Families: Transcription Factors

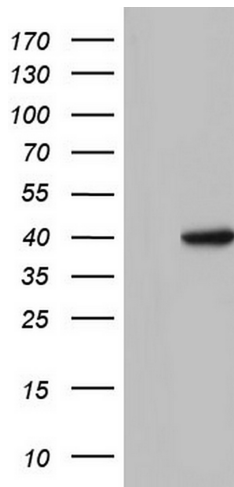
MW: 39.5 kDa

Gene Summary: The protein encoded by this gene is a dimethyltransferase that methylates the conserved stem loop of mitochondrial 12S rRNA. The encoded protein also is part of the basal mitochondrial transcription complex and is necessary for mitochondrial gene expression. The methylation and transcriptional activities of this protein are independent of one another. Variations in this gene may influence the severity of aminoglycoside-induced deafness (AID). [provided by RefSeq, Aug 2010]

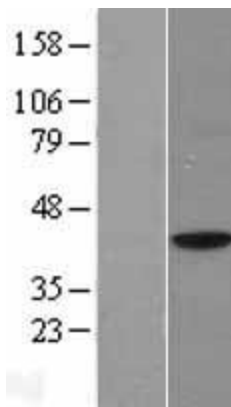
Product images:



Circular map for RC204643



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TFB1M (Cat# RC204643, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TFB1M (Cat# [TA804108]). Positive lysates [LY402490] (100ug) and [LC402490] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402490]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204643 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).