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Product datasheet for RC201683

TFB2M (NM_022366) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TFB2M (NM_022366) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TFB2M
Synonyms:	Hkp1; mtTFB2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC201683 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTGGATCCCAGTGGTCGGGCTTCCTCGGCGGCTGAGGCTCTCCGCCTTGGCGGGCGCTGGTCGCTTTT
GCATTTTAGGGTCTGAAGCGGCGACGCGAAAGCATTTGCCGGCGAGGAACCACTGTGGGCTCTCTGACTC
CTCTCCGCAGCTGTGGCCCGAACCGGATTTCAGGAATCCGCCAAGGAAGGCGTCTAAGGCCAGCTTAGAC
TTTAAGCGTTACGTAACCGATCGGAGATTGGCTGAGACCCTGGCGCAAATCTATTTGGGAAAACCAAGTA
GACCTCCACACCTACTGCTGGAGTGCAATCCAGGTCCTGGAATCCTGACTCAGGCATTACTTGAAGCTGG
TGCCAAAGTGGTTGCGCTCGAAAGTGACAAAACTTTTATTCCACATTTGGAGTCCTTAGGAAAAAATCTG
GATGGAAAACTACGAGTGATTCACTGTGACTTCTTTAAACTAGATCCTAGAAGTGGTGGAGTAATAAAAC
CACCTGCTATGTCTTCTCGAGGGCTCTTTAAGAATTTGGGAATAGAAGCAGTTCCTTGGACAGCAGACAT
CCCTTTAAAAGTAGTTGGAATGTTCCCAAGTAGAGGTGAGAAAAGGGCACTTTGGAAACTCGCATATGAC
TTGTATTCCTGTACTTCTATATATAAATTTGGACGAATAGAAGTAAATATGTTTATTGGTGAAAAAGAAT
TCCAGAAACTAATGGCAGATCCTGGAAATCCAGACTTGTATCATGTATTAAGTGTTATCTGGCAATTAGC
TTGTGAGATTAAGGTTCTGCACATGGAGCCTTGGTCATCATTTGATATATACACCCGGAAAGGGCCGCTG
GAAAACCCAAAGCGTAGGGAATTATTAGACCAATTACAACAAAAGCTGTATCTTATTCAAATGATTCCTC
GTCAAAATTTATTTACCAAGAACTTAACACCTATGAACTATAATATATTTTTTCACTTGTTAAAGCACTG
TTTTGGGAGGCGCAGCGCCACTGTAATAGACCACTTACGTTCATTGACTCCACTTGATGCGAGAGATATA
TTGATGCAAATAGGAAAACAGGAGGATGAGAAAGTAGTTAACATGCACCCTCAAGACTTCAAAACACTTT
TTGAAACTATAGAGCGTTCCAAAGATTGTGCTTATAAATGGCTGTATGATGAAACCCTGGAAGATAGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC201683 protein sequence
Red=Cloning site Green=Tags(s)

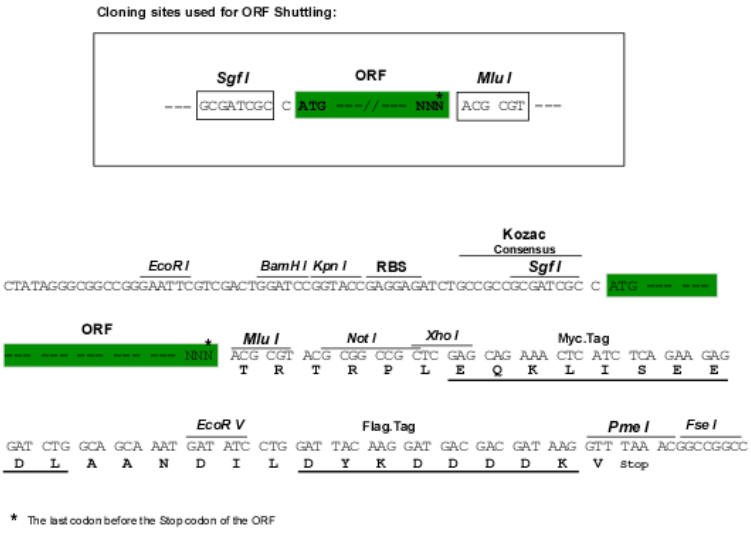
MWIPVVGLPRRLRLSALAGAGRFCILGSEAATRKHLPARNHCGLSDSSPQLWPEPDFRNPPRKASKASLD
FKRYVTDRRLAETLAQIYLGKPSRPPHLLLECNPGPGILTQALLEAGAKVVALESDKTFIPHLESLGKNL
DGKLRVIHCDFFKLDPRSGGVIKPPAMSSRGLFKNLGIEAVPWTADIPLKVVGMFPSRGEKRALWKLAYD
LYSCTSIYKFGRIEVNMFIGEKEFQKLMADPGNPDLYHVLSVIWQLACEIKVLHMEPWSSFDIYTRKGPL
ENPKRRELLDQLQQKLYLIQMIPRQNLFTKNLTPMNYNIFFHLLKHCFGRRSATVIDHLRSLTPLDARDI
LMQIGKQEDEKVVNMHPQDFKTLFETIERSKDCAYKWLYDETLEDR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6138_a08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_022366

ORF Size: 1188 bp

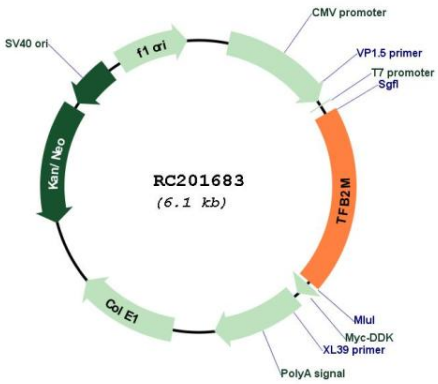
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

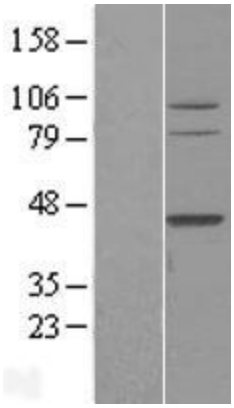
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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:	NM_022366.3
RefSeq Size:	1799 bp
RefSeq ORF:	1191 bp
Locus ID:	64216
UniProt ID:	Q9H5Q4
Cytogenetics:	1q44
Domains:	rADc
Protein Families:	Transcription Factors
MW:	45.3 kDa
Gene Summary:	S-adenosyl-L-methionine-dependent methyltransferase which specifically dimethylates mitochondrial 12S rRNA at the conserved stem loop. Also required for basal transcription of mitochondrial DNA, probably via its interaction with POLRMT and TFAM. Stimulates transcription independently of the methyltransferase activity. Compared to TFB1M, it activates transcription of mitochondrial DNA more efficiently, while it has less methyltransferase activity.[UniProtKB/Swiss-Prot Function]

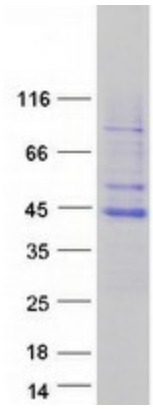
Product images:



Circular map for RC201683



Western blot validation of overexpression lysate (Cat# [LY402922]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201683 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TFB2M protein (Cat# [TP301683]). The protein was produced from HEK293T cells transfected with TFB2M cDNA clone (Cat# RC201683) using MegaTran 2.0 (Cat# [TT210002]).