

Product datasheet for MR203015

Tfam (NM_009360) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tfam (NM_009360) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tfam
Synonyms:	Al661103; Hmgts; mtTFA; tsHMG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR203015 representing NM_009360 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGCTGTTCCGGGAATGTGGAGCGTGCTAAAAGCACTGGGGCGCACGGGGTTCGAGATGTGCGCGG
GCTGCGGGGTCGCATCCCCTCGTCTATCAGTCTGTCTGTATTCCGAAGTGTTCAGCATGGGTAG
CTATCCAAAGAACTATGAGTTCATACCTTCGATTTCCACAGAACAGTACCCAAATTTAAAGCTAAA
CACCCAGATGCAAACTTTCAGAATTGGTTAGGAAAATTGCAGCCCTGTGGAGGGAGCTACCAGAAGCAG
AAAAAAGGTTTATGAAGCTGATTTTAAAGCTGAGTGGAAGCATACAAAGAAGCTGTGAGCAAGTATAA
AGAGCAGCTAACTCCAAGTCAGCTGATGGGTATGGAGAAGGAGGCCCGCAGAGACGGTTAAAAAGAAA
GCACTGGTAAAGAGAAGAGAATTAATTTTGCTTGAAAACCAAAAAGACCTCGTTTCAGCATATAACATTT
ATGTATCTGAAAGCTTCCAGGAGGCAAAGGATGATTCGGCTCAGGGAAAATTGAAGCTTGTAAATGAGGC
TTGGAAAATCTGTCTCCTGAGGAAAAGCAGGCATATATTCAGCTTGCTAAAGATGATAGGATTCGTTAC
GACAATGAAATGAAGTCTTGGGAAGAGCAGATGGCTGAAGTTGGACGAAGTATCTCATCCGTCGAAGTG
TGAAACGATCCGGAGACATCTCTGAGCAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR203015 representing NM_009360
Red=Cloning site Green=Tags(s)

MALFRGMWSVLKALGRTGVEMCAGCGGRIPSSISLVCIPKCFSSMGSYPKPMSSYLRFSTEQLPKFKAK
 HPDAKLSELVRKIAALWRELPEAEKKVYEADFKAEWKAYKEAVSKYKEQLTPSQLMGMEKEARQRLKKK
 ALVKRRELILLGPKRPRRAYNIYVSESFQEAKDDSAQGKLLVNEAWKNLSPEEKQAYIQLAKDDRIRY
 DNEMKSWEEQMAEVGRSDLIRRSVKRSGDISEH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_009360

ORF Size: 729 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_009360.4](#)

RefSeq Size: 3920 bp

RefSeq ORF: 732 bp

Locus ID: 21780

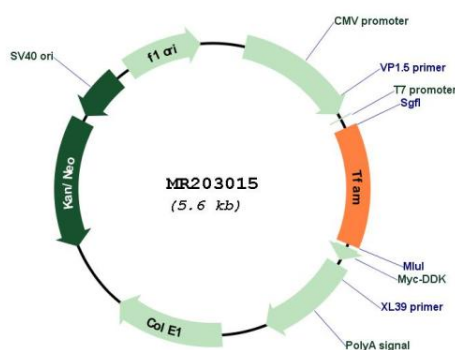
UniProt ID: [P40630](#)

Cytogenetics: 10 36.83 cM

MW: 28.4 kDa

Gene Summary: Isoform Mitochondrial binds to the mitochondrial light strand promoter and functions in mitochondrial transcription regulation. Required for accurate and efficient promoter recognition by the mitochondrial RNA polymerase. Promotes transcription initiation from the HSP1 and the light strand promoter by binding immediately upstream of transcriptional start sites. Is able to unwind DNA. Bends the mitochondrial light strand promoter DNA into a U-turn shape via its HMG boxes. Required for maintenance of normal levels of mitochondrial DNA. May play a role in organizing and compacting mitochondrial DNA. Isoform Nuclear may also function as a transcriptional activator or may have a structural role in the compaction of nuclear DNA during spermatogenesis.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR203015