

Product datasheet for **SC118128**

mtTFA (TFAM) (NM_003201) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	mtTFA (TFAM) (NM_003201) Human Untagged Clone
Tag:	Tag Free
Symbol:	mtTFA
Synonyms:	MTDPS15; MTTF1; MTTFA; TCF6; TCF6L1; TCF6L2; TCF6L3
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC118128 sequence for NM_003201 edited (data generated by NextGen Sequencing)

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ATGGCGTTTCTCCGAAGCATGTGGGGCGTGCTGAGTGCCCTGGGAAGGTCTGGAGCAGAG
CTGTGCACCGGCTGTGGAAGTCGACTGCGCTCCCCCTCAGTTTTGTGTATTTACCGAGG
TGGTTTTTCATCTGTCTTGCAAGTTGTCCAAAGAAACCTGTAAGTTCTTACCTTCGATTT
TCTAAAGAACAACCTACCCATATTTAAAGCTCAGAACCAGATGCAAAAACCTACAGAACTA
ATTAGAAGAATTGCCAGCGTTGGAGGGAACCTCCTGATTCAAAGAAAAAATATATCAA
GATGCTTATAGGGCGGAGTGGCAGGTATATAAAGAAGAGATAAGCAGATTTAAAGAACAG
CTAACTCCAAGTCAGATTATGTCTTTGGAAAAAGAAATCATGGACAAACATTTAAAAAGG
AAAGCTATGACAAAAAAGAGTTAACTGCTTGGAAAAACAAAAAGACCTCGTTCA
GCTTATAACGTTTATGTAGCTGAAAGATTCCAAGAAGCTAAGGGTGATTCACCGCAGGAA
AAGCTGAAGACTGTAAAGGAAAACCTGGAAAAATCTGTCTGACTCTGAAAAGGAATTATAT
ATTCAGCATGCTAAAGAGGACGAAAACCTGTTATCATAATGAAATGAAGTCTTGGGAAGAA
CAAATGATTGAAGTTGGACGAAAGGATCTTCTACGTCGCACAATAAAGAAACAACGAAAA
TATGGTGCTGAGGAGTGTAA
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Clone variation with respect to NM_003201.1



[View online »](#)

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_003201 unedited
TGTAATACGACTCACTATAGGGCGGCCGNGATTCCGGCACGAGGATAACACACGCCGGAG
GGTCGCACGCGGGTTCCAGTTGTGATTGCTGGAGTTGTGTATTGCCAGGAGGCTCTCCGA
GATTGGGGTGGGTCCTGCCTCATCCACCGGAGCGATGGCGTTTCTCCGAAGCATGTGG
GGCGTGTGAGTCCCTGGGAAGGTCTGGAGCAGAGCTGTGCACCGGCTGTGGAAGTCGA
CTGCGCTCCCCCTCAGTTTTGTGATTTACCGAGGTGGTTTTTCATCTGTCTTGGCAAGT
TGTCCAAAAGAACCTGTAAGTTCTTACCTTCGATTTTCTAAAGAACAACACTACCCATATTT
AAAGCTCAGAACCCAGATGCAAAAACTACAGAACTAATTAGAAGAATTGCCAGCGTTGG
AGGGAACCTCCTGATTCAAGAAAAAATATATCAAGATGCTTATAGGGCGGAGTGGCAG
GTATATAAAGAAGAGATAAGCAGATTTAAAGAACAGCTAACTCCAAGTCAGATTATGTCT
TTGAAAAAAGAAATCATGGACAAACATTTAAAAAGGAAAGCTATGACAAAAAAGAG
TTAACTGCTTGGAAAAACAAAAAGACCTCGTTAGCTTATAACGTTTATGTAGCTGA
AAGATTCAGAAGCTAAGGGTATTACCGNCAGAAAAAGCTGAGACTGGTAAGCANAA
CTGCGANAATCTGTCTGACTCTGAANAGGAAATATATATTCAGCATGCTAAAGAAAACGA
AACTCGTTATCATAATGAAATGAAGTCTCGCGAAGAACAATGATTGNAAGTGGACGAAA
GGATCCTCTACGTCGCACAATAAAGGAACAACGAAATAATGTGCTGAGGAGTGTTAAAGT
ANAAGATGANNAGGGCTCCCATGGNATAGCCAGNAACCTT
```

3' Read Nucleotide Sequence:

```
>OriGene 3' read for NM_003201 unedited
TGGAACGCAGGCCCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTGGTTGTGTTTCAA
CAAACCTTATTTATGAACACTAAATATTCATGTTAATTTTCAAGTATCATAAAAGCTTT
AAAAAAAACATTTAAAATTATAACACAATTCCTAGCTCACAGGCCATAAAAAGCAGGC
AGCAGGCTGGATTTGATCCACAGGCCATAGTTGGCTGTCTTTAAACAGGCTTTTATACG
TTATGCAAAGTGTTTCAAATCCAGAGACTTTGGAGACTTTTCGTTTTTTAGATTTCTCA
TTTTAAAACACACATAATACAAGTTTTCTTTCTGGATCAATATACTCACGAGAGAAAATA
ATTCAGAAAAAATAAAATTCCTTACTTAAAAAAGGGAAAAGCTATAGAACAATGTTT
CGTCTTAAATATATTTAGGAAATGTAATAAAGATTAATAATTTTATTCTATGCAAC
ATAAAATAATATGCATAAATCTGGCACATAATTTCTTTGTTTTACTTTAGAAAAAGAC
AGTAAGAAAAAGTTTATAAATTTCTCAGTCCCTTTTATACAAAGTTGCAACTAAAACA
GCAATCACTTATATGTACAACCATCAACTCTGAATACAATGTGAATTATACCTAGGAACT
GTAATTTACCTAGATGAGTTCTGCCTGCTTATGAAAAACACACACTTATATCACAGAAC
ACCGTGGCTTCTACAATTTGTAACAATTTTAAAACGAAACTCCTGCCTCCATAATATAA
GGAAACAAGAGTACTCTTCCATAGTCATCATCCTGTATAAAAAAACTTCATAGTCTGA
TTTACCTTTGNCAAAGGTANAATGATTCACATTTGCTTGGGATACTCTGATCCTCAGAGG
TCCTAACACAAAATAAAGTTTGCATGC
```

Restriction Sites:

NotI-NotI

ACCN:

NM_003201

Insert Size:

1920 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 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](#)

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_003201.1](#), [NP_003192.1](#)

RefSeq Size: 1936 bp

RefSeq ORF: 741 bp

Locus ID: 7019

UniProt ID: [Q00059](#)

Cytogenetics: 10q21.1

Domains: HMG

Protein Families: Druggable Genome, Transcription Factors

Protein Pathways: Huntington's disease

Gene Summary:

This gene encodes a key mitochondrial transcription factor containing two high mobility group motifs. The encoded protein also functions in mitochondrial DNA replication and repair. Sequence polymorphisms in this gene are associated with Alzheimer's and Parkinson's diseases. There are pseudogenes for this gene on chromosomes 6, 7, and 11. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2012]
Transcript Variant: This variant (1, also known as ref) encodes the longer isoform (1).
Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.