

## Product datasheet for RC215488

### mtTFA (TFAM) (NM\_003201) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	mtTFA (TFAM) (NM_003201) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	mtTFA
Synonyms:	MTDPS15; MTTF1; MTTFA; TCF6; TCF6L1; TCF6L2; TCF6L3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215488 representing NM_003201 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGTTTCTCCGAAGCATGTGGGGCGTGCTGAGTGCCTGGGAAGGTCTGGAGCAGAGCTGTGCACCG  
GCTGTGGAAGTCGACTGCGCTCCCCCTCAGTTTTGTGATTTACCGAGGTGGTTTTCATCTGTCTTGGC  
AAGTTGTCCAAAGAACTGTAAGTTCTACCTTCGATTTCTAAAGAACAACATCCCATATTTAAAGCT  
CAGAACCAGATGCAAAAACACAGAATAATTAGAAGAATTGCCAGCGTTGGAGGGAACCTCCTGATT  
CAAAGAAAAAATATATCAAGATGCTTATAGGGCGGAGTGGCAGGTATATAAAGAAGAGATAAGCAGATT  
TAAAGAACAGCTAACTCCAAGTCAGATTATGTCTTTGGAAAAAGAAATCATGGACAAACATTTAAAAGG  
AAAGCTATGACAAAAAAGAGTTAACACTGCTTGGAAAAACAAAAGACCTCGTTACGCTTATAACG  
TTTATGTAGTGAAAGATTCCAAGAAGCTAAGGGTGATTCACCGCAGGAAAAGCTGAAGACTGTAAGGA  
AACTGGAAAAATCTGTCTGACTCTGAAAAGGAATTATATATTCAGCATGCTAAAGAGGACGAAACTCGT  
TATCATAATGAAATGAAGTCTTGGGAAGAACAATGATTGAAGTTGGACGAAAGGATCTTCTACGTCGCA  
CAATAAGAAAACAACGAAAATATGGTGCTGAGGAGTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC215488 representing NM\_003201  
Red=Cloning site Green=Tags(s)

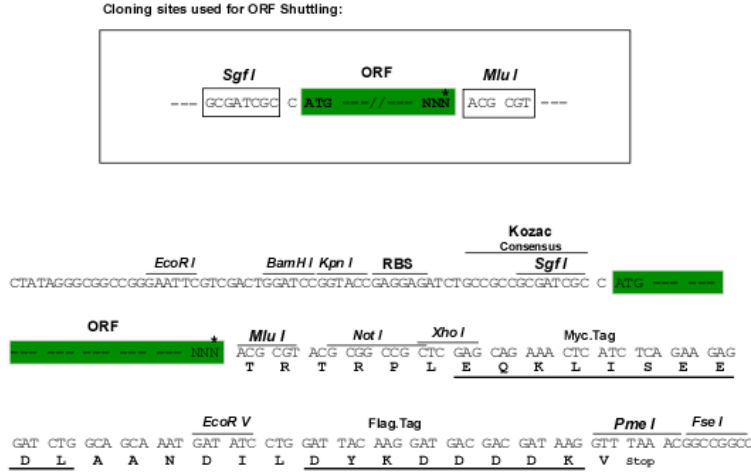
MAFLRSMWVLSALGRSGAELCTGCGSRLRSPFSFVYLPRWFSSVLASCPKPKPVSSYLRFSSKEQLPIFKA  
QNPDAKTTELIRRIAQRWRELPDSKKKIYQDAYRAEWQVYKEEISRFKEQLTPSQIMSLEKEIMDKHLKR  
KAMTKKKELTLLGPKRPRSAYNVVVAERFQEAAGDSPQEKLKVKENWKNLSDSEKELYIQHAKEDETR  
YHNEMKSWEEQMIEVGRKDLLRRTIKKQRKYGAEEC

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mg2412\\_b01.zip](https://cdn.origene.com/chromatograms/mg2412_b01.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



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

ACCN: NM\_003201

ORF Size: 738 bp

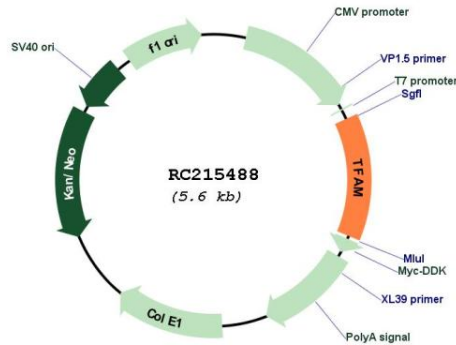
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially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

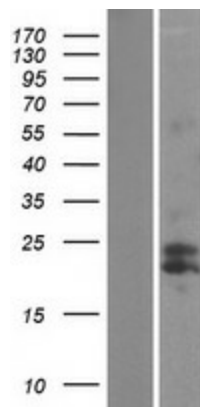
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_003201.3</a>
<b>RefSeq Size:</b>	1936 bp
<b>RefSeq ORF:</b>	741 bp
<b>Locus ID:</b>	7019
<b>UniProt ID:</b>	<a href="#">Q00059</a>
<b>Cytogenetics:</b>	10q21.1
<b>Domains:</b>	HMG
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>Protein Pathways:</b>	Huntington's disease
<b>MW:</b>	29.1 kDa
<b>Gene Summary:</b>	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]

Product images:



Circular map for RC215488



Western blot validation of overexpression lysate (Cat# [LY401108]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215488 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).