

## Product datasheet for RC204979

### TSFM (NM\_005726) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TSFM (NM_005726) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TSFM
Synonyms:	EFTS; EFTSMT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204979 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCGCTGCTGCGGTGCTGCGGTGTTTCTGGTCGCGCGGACCGGGAGCTACCCGGCTGGGTCTCTTC  
TGCGTCAGTCGCCCCAGCCAAGGCACACATTTTATGCTGGGCCCGTCTGTCTGCCTCGGCCTCCAGCAA  
GGAGCTCCTCATGAAGCTGCGGCGGAAAACAGGCTACTCCTTTGTAATGCAAGAAAGCTGGAGACT  
TGTGGCGGGACCTCAAACAGGCAGAGATCTGGCTCCACAAGGAGGCCAGAAGGAGGGCTGGAGCAAAG  
CTGCCAAGCTCCAAGGGAGGAAGACCAAAGAAGCCTGATTGGGCTGTTGCAGGAAGGAAACACAAGTGT  
ATTAGTAGAGGTAAGTGTGAGACAGATTTTGTCTAGAAATTTAAATTTCAACTGTTGGTCCAGCAA  
GTAGCCCTTGGAAACCATGATGCATTGTCAGACCCTAAAGGATCAACCCTCTGCATACAGTAAAGTGCACT  
GGCTCACGCCCTGTAACCTAGCACTTTGGGAGGCTGAAGCAGGTGGATCACTTGAGGGTTTCTTGAATTC  
CTCTGAGCTTTCTGGACTTCCAGCTGGGCCTGACAGAGAAGGCTCACTCAAGGATCAGTTGGCTTTAGCA  
ATTGAAAAGTGGGAGAAAACATGATTCTTAAACGAGCTGCATGGGTGAAGTGCCATCTGGGTTTACG  
TTGGCTCTATGTCCACGGAGCAATGCAGAGTCCCTCACTTACAAGCTGGTGTGGGGAAGTATGGGGC  
CCTGGTCATCTGTGAGACGTCTGAACAGAAAACAACCTTGAAGACGTTGGCCCGCCTTGGGCAGCAT  
GTGGTGGGCATGGCCCCCTCTGTTGGCTCCCTGGACGATGAGCCTGGGGGAGAGGCAGAGACTAAGA  
TGCTGTCCAGCCGATTTGCTGGATCCCTCCATTACCTTGGGGCAGTATGTGCAGCCTCAGGGGTGTC  
GGTAGTAGACTTTGTGCGGTTTGAATGTGGAGAAGGTGAAGAGGCAGCAGAACTGAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC204979 protein sequence  
Red=Cloning site Green=Tags(s)

MSLLRSLRVFLVARTGSYPAGSLLRQSPQPRHTFYAGPRLSASASSKELLMKLRRTGYSFVNCCKALET  
 CGGDLKQAEIWLHKEAQKEGWSKAAKLQGRKTKEGLIGLLQEGNTTVLVEVNCETDFVSRNLKFQLLVQQ  
 VALGTMHHCQTLKDQPSAYSQVQLTPVNLALWEAEAGGSLEGFLNSELGLPAGPDREGSLKDQLALA  
 IGKLGEMILKRAAWVKVPSGFYVGSYVHGAMQSPSLHKLVLGKYGALVICETSEQKTNLEEDVGRRLGQH  
 VVGMAPLSVGSGLDDEPGGEAETKMLSQPYLLDPSITLGGYYVQPQGVSVVDFVRFECGEGEEAAETE

TRTRPLEQKLISEEDLAANDILDYKDDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6426\\_f04.zip](https://cdn.origene.com/chromatograms/mk6426_f04.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\_005726

**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\\_005726.3](#)

**RefSeq Size:** 2039 bp

**RefSeq ORF:** 978 bp

**Locus ID:** 10102

**UniProt ID:** [P43897](#)

**Cytogenetics:** 12q14.1

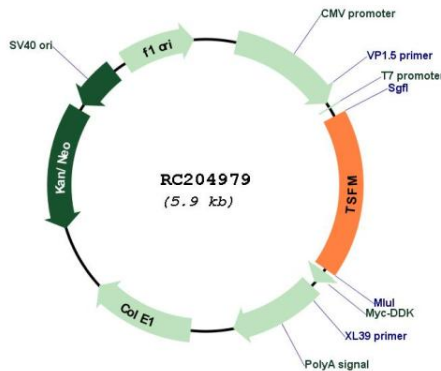
**Domains:** UBA, EF\_TS

**Protein Families:** Transcription Factors

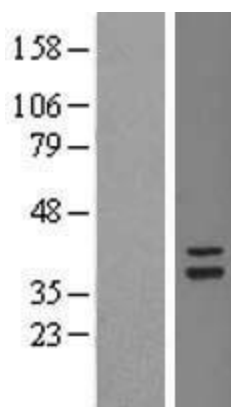
**MW:** 37.7 kDa

**Gene Summary:** This gene encodes a mitochondrial translation elongation factor. The encoded protein is an enzyme that catalyzes the exchange of guanine nucleotides on the translation elongation factor Tu during the elongation step of mitochondrial protein translation. Mutations in this gene are associated with combined oxidative phosphorylation deficiency-3 syndrome. Alternate splicing results in multiple transcript variants.[provided by RefSeq, Mar 2010]

**Product images:**



Circular map for RC204979



Western blot validation of overexpression lysate (Cat# [LY417107]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204979 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).