

# Recombinant human TSFM protein

Catalog Number: ATGP2691

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

46-346aa

### UniProt No.

P43897

### NCBI Accession No.

NP\_005717.2

### Alternative Names

Ts translation elongation factor mitochondrial, Ts translation elongation factor, mitochondrial, COXPD3, EF-TS, EF-Tsmt

## PRODUCT SPECIFICATION

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### Molecular Weight

32.9 kDa (302aa)

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol 0.4M urea

### Purity

> 85% by SDS-PAGE

### Tag

Non-Tagged

### Application

SDS-PAGE, Denatured

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

TSFM is a mitochondrial translation elongation factor. It 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 TSFM are associated with combined oxidative phosphorylation deficiency-3 syndrome. Alternate splicing results in multiple transcript variants. Recombinant human TSFM protein, fused to His-tag at N-terminus, was expressed in E. coli.

## Recombinant human TSM protein

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### Amino acid Sequence

MSKELLMKLR RKTGYSFVNC KKALETCCGD LKQAEIWLHK EAQKEGWSKA AKLQGRKTKE GLIGLLQEGN TTVLVEVNCE  
TDFVSRNLKF QLLVQQVALG TMMHCQTLKD QPSAYSKVQW LTPVNLALWE AEAGGSLEGF LNSSELSGLP AGPDREGSLK  
DQLALAIGKL GENMILKRAA WVKVPSGFYV GSYVHGAMQS PSLHKLVLGK YGALVICETS EQKTNLEDVG RRLGQHVVMG  
APLSVGLDD EPGGEAETKM LSQPYLLDPS ITLGQYVQPQ GVSVDVDFVRF ECGEGEAAE TE

### General References

Xin H. et al. (1995) J Biol Chem. 270:17243-17249.  
Smeitink JA. et al. (2006) Am. J. Hum. Genet. 79:869-877.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)