

## Elongation factor Tu (TUFM) Recombinant Protein | TUFM recombinant protein

Recombinant Human Elongation factor Tu, mitochondrial (TUFM)

|                               |                                                                 |
|-------------------------------|-----------------------------------------------------------------|
| CATALOG #<br><b>AAA113203</b> | HOST<br><b>E Coli or Yeast or Baculovirus or Mammalian Cell</b> |
|-------------------------------|-----------------------------------------------------------------|

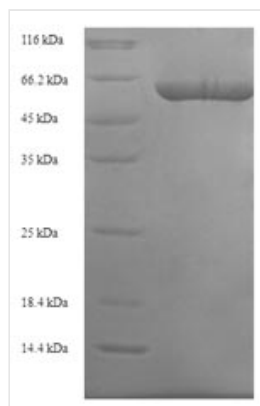
### PRODUCT SYNONYMS

Elongation factor Tu (TUFM); Recombinant Human Elongation factor Tu; mitochondrial (TUFM); P43; TUFM recombinant protein

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                    | E Coli or Yeast or Baculovirus or Mammalian Cell                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Purity/Purification     | Greater or equal to 85% purity as determined by SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Form/Format             | Lyophilized or liquid (Format to be determined during the manufacturing process)                                                                                                                                                                                                                                                                                                                                                                                                |
| Sequence Positions      | 47-455aa; Full Length of Mature Protein                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Sequence                | AVEAKKTYVR DKPHVNVGTI GHVDHGKTTL TAAITKILAE GGGAKFKKYE EIDNAPEERA RGITINAAHV<br>EYSTAARHYA HTDCPGHADY VKNMITGTAP LDGCILVVAA NDGPMPQTRE HLLLARQIGV EHVVVVYNKA<br>DAVQDSEMVE LVELEIRELL TEFGYKGEET PVIVGSALCA LEGRDPELGL KSVQKLLDAV DTYPVPARD<br>LEKPFLLPVE AVYSVPGRGT VVTGTLERGI LKKGDECELL GHSKNIRTVV TGIEMFHKSL ERAEAGDNLG<br>ALVRGLKRED LRRGLVMVKP GSIKPHQKVE AQVYILSKEE GGRHKPFVSH FMPVMFSLTW DMACRIILPP<br>EKELAMPGED LKFNLILRQP MILEKGQRFT LRDGNRTIGT GLVTNTLAMT EEEKNIKWG |
| Preparation and Storage | Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.                                                                                                                                                                                                                                                                                                                                                                                          |

### IMAGES



SDS-PAGE

### ADDITIONAL INFORMATION

|                                                          |                                                                                                                           |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for TUFM recombinant protein | This protein promotes the GTP-dependent binding of aminoacyl-tRNA to the A-site of ribosomes during protein biosynthesis. |
| Product Categories/Family for TUFM recombinant protein   | <a href="#">Metabolism</a>                                                                                                |

References

Cloning, sequence analysis and expression of mammalian mitochondrial protein synthesis elongation factor Tu.Woriatx V.L., Burkhart W.A., Spremulli L.L.Biochim. Biophys. Acta 1264:347-356(1995) A mitochondrial elongation factor-like protein is over-expressed in tumours and differentially expressed in normal tissues.Wells J., Henkler F., Leversha M., Koshy R.FEBS Lett. 358:119-125(1995) The human mitochondrial elongation factor Tu (EF-Tu) gene cDNA sequence, genomic localization, genomic structure, and identification of a pseudogene.Ling M., Merante F., Chen H.-S., Duff C., Duncan A.M.V., Robinson B.H.Gene 197:325-336(1997) The sequence and analysis of duplication-rich human chromosome 16.Martin J., Han C., Gordon L.A., Terry A., Prabhakar S., She X., Xie G., Hellsten U., Chan Y.M., Altherr M., Couronne O., Aerts A., Bajorek E., Black S., Blumer H., Branscomb E., Brown N.C., Bruno W.J., Buckingham J.M., Callen D.F., Campbell C.S., Campbell M.L., Campbell E.W., Caoile C., Challacombe J.F., Chasteen L.A., Chertkov O., Chi H.C., Christensen M., Clark L.M., Cohn J.D., Denys M., Detter J.C., Dickson M., Dimitrijevic-Bussod M., Escobar J., Fawcett J.J., Flowers D., Fotopulos D., Glavina T., Gomez M., Gonzales E., Goodstein D., Goodwin L.A., Grady D.L., Grigoriev I., Groza M., Hammon N., Hawkins T., Haydu L., Hildebrand C.E., Huang W., Israni S., Jett J., Jewett P.B., Kadner K., Kimball H., Kobayashi A., Krawczyk M.-C., Leyba T., Longmire J.L., Lopez F., Lou Y., Lowry S., Ludeman T., Manohar C.F., Mark G.A., McMurray K.L., Meincke L.J., Morgan J., Moyzis R.K., Mundt M.O., Munk A.C., Nandkeshwar R.D., Pitluck S., Pollard M., Predki P., Parson-Quintana B., Ramirez L., Rash S., Retterer J., Ricke D.O., Robinson D.L., Rodriguez A., Salamov A., Saunders E.H., Scott D., Shough T., Stallings R.L., Stalvey M., Sutherland R.D., Tapia R., Tesmer J.G., Thayer N., Thompson L.S., Tice H., Torney D.C., Tran-Gyamfi M., Tsai M., Ulanovsky L.E., Ustaszewska A., Vo N., White P.S., Williams A.L., Wills P.L., Wu J.-R., Wu K., Yang J., DeJong P., Bruce D., Doggett N.A., Deaven L., Schmutz J., Grimwood J., Richardson P., Rokhsar D.S., Eichler E.E., Gilna P., Lucas S.M., Myers R.M., Rubin E.M., Pennacchio L.A.Nature 432:988-994(2004) Dunn M.J.Lysine acetylation targets protein complexes and co-regulates major cellular functions.Choudhary C., Kumar C., Gnad F., Nielsen M.L., Rehman M., Walther T.C., Olsen J.V., Mann M.Science 325:834-840(2009) Initial characterization of the human central proteome.Burkard T.R., Planyavsky M., Kaupe I., Breitwieser F.P., Buerckstuemmer T., Bennett K.L., Superti-Furga G., Colinge J.BMC Syst. Biol. 5:17-17(2011) An enzyme assisted RP-RPLC approach for in-depth analysis of human liver phosphoproteome.Bian Y., Song C., Cheng K., Dong M., Wang F., Huang J., Sun D., Wang L., Ye M., Zou H.J. Proteomics 96:253-262(2014) Infantile encephalopathy and defective mitochondrial DNA translation in patients with mutations of mitochondrial elongation factors EFG1 and EFTu.Valente L., Tiranti V., Marsano R.M., Malfatti E., Fernandez-Vizarra E., Donnini C., Mereghetti P., De Gioia L., Burlina A., Castellan C., Comi G.P., Savasta S., Ferrero I., Zeviani M.Am. J. Hum. Genet. 80:44-58(2007)

NCBI AND UNIPROT INFORMATION

|                                  |                                                 |
|----------------------------------|-------------------------------------------------|
| NCBI GI #                        | 34147630                                        |
| NCBI GeneID                      | 7284                                            |
| NCBI Accession #                 | NP_003312.3                                     |
| NCBI GenBank Nucleotide #        | NM_003321.4                                     |
| UniProt Accession #              | P49411; O15276                                  |
| Molecular Weight                 | 47 kDa                                          |
| NCBI Official Full Name          | elongation factor Tu, mitochondrial             |
| NCBI Official Synonym Full Names | Tu translation elongation factor, mitochondrial |
| NCBI Official Symbol             | TUFM                                            |
| NCBI Official Synonym Symbols    | P43; EFTU; COXPD4; EF-TuMT                      |
| NCBI Protein Information         | elongation factor Tu, mitochondrial             |
| UniProt Protein Name             | Elongation factor Tu, mitochondrial             |
| UniProt Gene Name                | TUFM                                            |
| UniProt Synonym Gene Names       | EF-Tu                                           |
| UniProt Entry Name               | EFTU_HUMAN                                      |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

