

Recombinant human TARS1 protein

Catalog Number: ATGP1417

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-723aa

UniProt No.

P26639

NCBI Accession No.

NP_689508

Alternative Names

threonyl-tRNA synthetase cytoplasmic, threonyl-tRNA synthetase, cytoplasmic, ThrRS

PRODUCT SPECIFICATION

Molecular Weight

85.6 kDa (743aa)

Concentration

0.5mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 2mM DTT, 20% glycerol, 150mM NaCl

Purity

> 85% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

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

Description

TARS (Threonyl-tRNA synthetase, cytoplasmic) belongs to the class-II aminoacyl-tRNA synthetase family. This protein has its main role in tRNA aminoacylation. The N-terminal domain of the enzyme is responsible for the competition with the ribosome whilst the catalytic and the C-terminal domain are involved in binding the two anticodon arm-like structures in the operator. Recombinant human TARS protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Recombinant human TARS1 protein

Catalog Number: ATGP1417

Amino acid Sequence

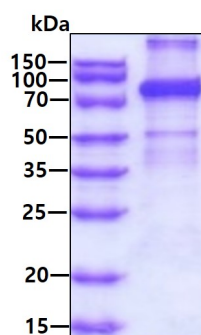
<MGSSHHHHH SSGLVPRGSH> MFEEKASSPS GKMGGEKPI GAGEEKQKEG GKKNKEGSG DGGRAELNPW
PEYIYTRLEM YNILKAEHDS ILAEKAEKDS KPIKVTLPDG KQVDAESWKT TPYQIACGIS QGLADNTVIA KVNNVWDL
RPLEEDCTLE LLKFEDEEAQ AVYWHSSAHI MGEAMERVY GCLCYGPPIE NGFYDMYLE EGGVSSNDFS SLEALCKII
KEKQAFERLE VKKETLLAMF KYNKFKCRIL NEKVNTPTTT VYRCGPLIDL CRGPHVRHTG KIKALKIHK N SSTYWEGKAD
METLQRIYGI SFPDPKMLKE WEKFQEEAKN RDHRKIGRDQ ELYFFHELSP GSCFFLPKGA YIYNALIEFI RSEYRKRGFQ
EVVTPNIFNS RLWMTSGHWQ HYSNMFSFE VEKELFALKP MNCPGHCLMF DHRPRSWREL PLRLADFGVL HRNELSGALT
GLTRVRRFQQ DDAHIFCAME QIEDEIKGCL DFLRTVYSVF GFSFKLNLST RPEKFLGDIE VWDQAEKQLE NSLNEFGEKW
ELNSGDGAFY GPKIDIQIKD AIGRYHQCAT IQLDFQLPIR FNLTIVSHDG DDKKRPVIVH RAILGSVERM IAILTENYGG
KWPFWLSPRQ VMVVPVGPTC DEYAQKVRQQ FHDAKFMADI DLDPGCTLNK KIRNAQLAQY NFILVVGEKE KISGTVNIRT
RDNKVHGERT ISETIERLQQ LKEFRSKQAE EEF

General References

Freist W, et al. (1995). Biol. Chem. Hoppe-Seyler 376 (4): 213-24.
Pan F, et al. (1982). Int. J. Pept. Protein Res. 20 (2): 159-66.

DATA

SDS-PAGE



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