

# Recombinant human DARS protein

Catalog Number: ATGP1454

## PRODUCT INFORMATION

---

### Expression system

E.coli

### Domain

1-501aa

### UniProt No.

P14868

### NCBI Accession No.

NP\_001340

### Alternative Names

Aspartyl-tRNA synthetase

## PRODUCT SPECIFICATION

---

### Molecular Weight

59.2 kDa (521aa)

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 40% glycerol, 0.15M NaCl, 1mM DTT

### 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

DARS, also known as aspartyl-tRNA synthetase, catalyzes the specific attachment of an amino acid to its cognate tRNA in a 2 step reaction: the amino acid (AA) is first activated by ATP to form AA-AMP and then transferred to the acceptor end of the tRNA. Recombinant human DARS protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

### Amino acid Sequence

<MGSSHHHHHH SGLVPRGSH> MPSASASRKS QEKPREIMDA AEDYAKERYG ISSMIQSQEK PDRVLVRVD

# Recombinant human DARS protein

Catalog Number: ATGP1454

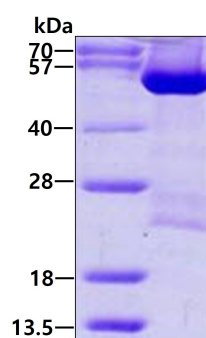
LTIQKADEVV WVRARVHTSR AKGKQCFLVL RQQQFNVQAL VAVGDHASKQ MVKFAANINK ESIVDVEGVV RKNVQKIGSC  
TQQDVELHVQ KIYVISLAEP RLPLQLDDAV RPEAEGEEEG RATVNDQTRL DNRVIDLRYS TSQAVFRLQS GICHLFRET  
LNKGFVEIQT PKIISAASEG GANVFTVSYF KNNAYLAQSP QLYKQMCICA DFEKVFSIGP VFRAEDSNTH RHLTEFVGLD  
IEMAFNYHYH EVMEEIADTM VQIFKGLQER FQTEIQTVNK QFPCEPFKFL EPTLRLEYCE ALAMLREAGV EMGDEDDLST  
PNEKLLGHLV KEKYDTDFYI LDKYPLAVRP FYTMPDPRNP QQSNSYDMFM RGEEILSGAQ RIHDPQLLTE RALHHGIDLE  
KIKAYIDSR FGAPPHAGGG IGLERVTMLF LGLHNVRQTS MFPRDPKRLT P

## General References

Guzzo C.M., et al. (2008) *Biochem. Biophys. Res. Commun.* 365:718-723  
Imami K., et al. (2001) *Anal. Sci.* 24:161-166

## DATA

### SDS-PAGE



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