

# Recombinant human HARS protein

Catalog Number: ATGP0726

## PRODUCT INFORMATION

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**Expression system**

E.coli

**Domain**

1-509aa

**UniProt No.**

P12081

**NCBI Accession No.**

NP\_002100

**Alternative Names**

Histidyl-tRNA synthetase cytoplasmic, FLJ20491, HRS, HisRS, Histidine--tRNA ligase, Histidyl-tRNA synthetase, cytoplasmic

## PRODUCT SPECIFICATION

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**Molecular Weight**

59.8 kDa (532aa) confirmed by MALDI-TOF

**Concentration**

1mg/ml (determined by absorbance at 280nm)

**Formulation**

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 1mM DTT, 0.1M NaCl.

**Purity**

> 95% 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

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**Description**

HARS, also known as Histidyl-tRNA synthetase, function to catalyze the aminoacylation of tRNAs by their corresponding amino acids. HARS is from the class II family of aminoacyl-tRNA synthetases. It is responsible for the synthesis of histidyl-transfer RNA, which is essential for the incorporation of histidine into proteins. HARS is a frequent target of autoantibodies in the human autoimmune disease polymyositis/dermatomyositis.

Recombinant human HARS protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using

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conventional chromatography techniques

## Amino acid Sequence

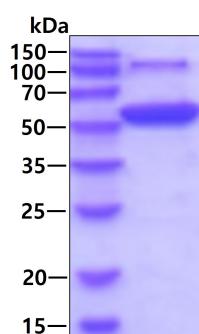
<MGSSHHHHH SSGLVPRGSH MGS>MAERAAL EELVKLQGER VRGLKQQKAS AELIEEEVAK LLKLKAQLGP DESKQKFVLK TPKGTRDYSP RQMAVREKVF DVIIRCFKRH GAEVIDTPVF ELKETLMGKY GEDSKLIYDL KDQGGELLSL RYDLTVPFAR YLAMNKLTI KRYHIAKVYR RDNPAMTRGR YREFYQCDFD IAGNFDPMIP DAECLKIMCE ILSSLQIGDF LVKVNDRRIL DGMFAICGVs DSKFRTICSS VDKLDKVSWE EVKNEMVGEK GLAPEVADRI GDYVQQHGGV SLVEQLLQDP KLSQNQALE GLGDLKLLFE YLTLEFGIDDK ISFDLSSLARG LDYYTGVIE AVLLQTPAQA GEEPLGVGSV AAGGRYDGLV GMFDPKGRKV PCVGLSIGVE RIFSIVEQRL EALEEKIRTT ETQVLVASAQ KKLLEERLKL VSELWDAGIK AELLYKKNPK LLNQLQYCEE AGIPLVAIIG EQELKDGVIK LRSVTSREEV DVRREDLVEE IKRRTGQPLC IC

## General References

- Raben N., et al. (1992) Nucleic Acids Res. 20(5):1075-81.  
O'Hanlon TP., et al. (2002) Biochem Biophys Res Commun. 294(3):609-14.

## DATA

### SDS-PAGE



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