

Recombinant human HARS protein

Catalog Number: ATGP0726

PRODUCT INFORMATION

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

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

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

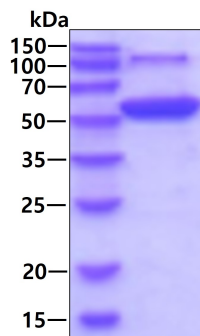
<MGSSHHHHH SSGLVPRGSH MGS>MAERAAL EELVKLQGER VRGLKQQKAS AELIEEEVAK LLKLKAQLGP
DESKQKFVLK TPKGTRDYSP RQMAVREKVF DVIIRCFKRH GAEVIDTPVF ELKETLMGKY GEDSKLIYDL KDQGGELLSL
RYDLTVPFAR YLAMNKLTNI KRYHIAKVYR RDNPAMTRGR YREFYQCDFD IAGNFDPMIP DAECLKIMCE ILSSLQIGDF
LVKVNDRRIL DGMFAICGVS DSKFRTICSS VDKLDKVSWE EVKNEMVGEK GLAPEVADRI GDYVQQHGGV SLVEQLLQDP
KLSQNKQALE GLGDLKLLFE YLTLFGIDDK ISFDLSLARG LDYYTGVIYE AVLLQTPAQA GEEPLGVGSV AAGGRYDGLV
GMFDPKGRKV PCVGLSIGVE RIFSIVEQRL EALEEKIRTT ETQVLVASAQ KKLEERLKL 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.