Recombinant human NARS protein

Catalog Number: ATGP3157

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-548aa

UniProt No.
O43776

NCBI Accession No.
NP_004530

Alternative Names
Asparagine--tRNA ligase cytoplasmic, ASNRS, NARS1

PRODUCT SPECIFICATION

Molecular Weight
65.3 kDa (571aa)

Concentration
0.25mg/ml (determined by absorbance at 280nm)

Formulation
Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

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
NARS also known as asparagine--tRNA ligase, cytoplasmic. This protein acts as an enzyme. It is known to catalyze the following reaction: ATP + L-asparagine + tRNA (Asn) = AMP + diphosphate + L-asparaginyl-tRNA (Asn). Aminoacyl-tRNA synthetases are a class of enzymes that charge tRNAs with their cognate amino acids. Asparaginyl-tRNA synthetase is localized to the cytoplasm and belongs to the class II family of tRNA synthetases. The N-terminal domain represents the signature sequence for the eukaryotic asparaginyl-tRNA synthetases. Recombinant human NARS, fused to His-tag at N-terminus, was expressed in E. coli and purified by using

conventional chromatography techniques

Amino acid Sequence

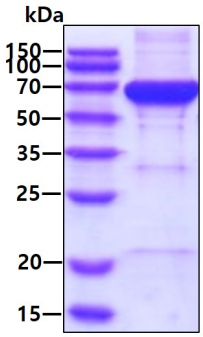
<MGSSHHHHHH SSGLVPRGSH MGS>MVLAELY VSDREGSDAT GDGTKEKPFK TGLKALMTVG KEPFPTIYVD SQKENERWNV ISKSQLKNIK KMWHREQMKS ESREKKEAED SLRREKNLEE AKKITIKNDP SLPEPKCVKI GALEGYRGQR VKVFGWVHRL RRQGKNLMFL VLRDGTGYLQ CVLADELCQC YNGVLLSTES SVAVYGMLNL TPKGKQAPGG HELSCDFWEL IGLAPAGGAD NLINEESDVD VQLNNRHMMI RGENMSKILK ARSMVTRCFR DHFFDRGYYE VTPPTLVQTQ VEGGATLFKL DYFGEEAFLT QSSQLYLETC LPALGDVFCI AQSYRAEQSR TRRHLAEYTH VEAECPFLTF DDLLNRLEDL VCDVVDRILK SPAGSIVHEL NPNFQPPKRP FKRMNYSDAI VWLKEHDVKK EDGTFYEFGE DIPEAPERLM TDTINEPILL CRFPVEIKSF YMQRCPEDSR LTESVDVLMP NVGEIVGGSM RIFDSEEILA GYKREGIDPT PYYWYTDQRK YGTCPHGGYG LGLERFLTWI LNRYHIRDVC LYPRFVQRCT P

General References

Beaulande M., et al. (1998) Nucleic Acids. 26(2):521-4.

DATA

SDS-PAGE



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