

Recombinant human TYW5 protein

Catalog Number: ATGP1851

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-315aa

UniProt No.

A2RUC4

NCBI Accession No.

NP_001034782

Alternative Names

tRNA wybutosine-synthesizing protein 5, C2orf60, Htyw5

PRODUCT SPECIFICATION

Molecular Weight

38.9 kDa (338aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 10% glycerol, 1mM DTT

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

tRNA wybutosine-synthesizing protein 5, also known as TYW5, acts as a component of the wybutosine biosynthesis pathway. Wybutosine is a hyper modified guanosine with a tricyclic base found at the 3'-position adjacent to the anticodon of eukaryotic phenylalanine tRNA. TYW5 catalyzes the hydroxylation of 7- (α-amino-α-carboxypropyl) wyosine (yW-72) into undermodified hydroxywybutosine (OHyW). OHyW is a derivative of wybutosine found in higher eukaryotes. Recombinant human TYW5 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

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Amino acid Sequence

MGSSHHHHHH SSSLVPRGSH MGSMAGQHLP VPRLEGVSRE QFMQHLYPQR KPLVLEGIDL GPCTSKWTVD
YLSQVGGKKE VKIHVAAVAQ MDFISKNFVY RFLPFDQLVQ RAAEEKHKEF FVSEDEKYYL RSLGEDPRKD VADIRKQFPL
LKGDIKFPEF FKEEQFFSSV FRISSPGLQL WTHYDVMDNL LIQVTGKKRV VLFSPRDAQY LYLKGTKSEV LNIDNPD LAK
YPLFSKARRY ECSLEAGDVL FIPALWFHNV ISEEFVGVN IFWKHLPSEC YDKTDTYGNK DPTAASRAAQ ILDRALKTLA
ELPEEYRDFY ARRMVLHIQD KAYSKNSE

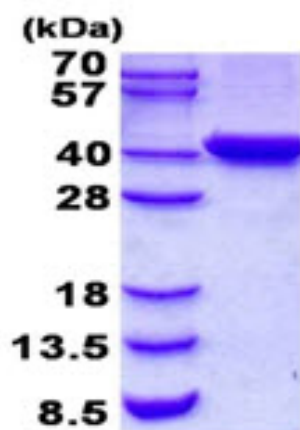
General References

Noma A., et al. (2010) J. Biol. Chem. 285:34503-34507

Kato M., et al. (2011) Nucleic Acids Res. 39:1576-1585

DATA

SDS-PAGE



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

15% SDS-PAGE (3ug)