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- (a-amino-a-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.

Recombinant human TYW5 protein

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Amino acid Sequence

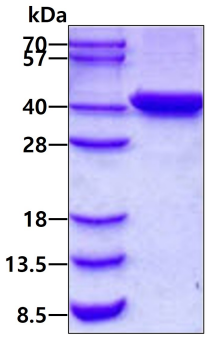
<MGSSHHHHHH SSGLVPRGSH MGS>MAGQHLP VPRLEGVSRE QFMQHLYPQR KPLVLEGIDL GPCTSKWTVD YLSQVGGKKE VKIHVAAVAQ MDFISKNFVY RTLPFDQLVQ RAAEEKHKEF FVSEDEKYYL RSLGEDPRKD VADIRKQFPL LKGDIKFPEF FKEEQFFSSV FRISSPGLQL WTHYDVMDNL LIQVTGKKRV VLFSPRDAQY LYLKGTKSEV LNIDNPDLAK YPLFSKARRY ECSLEAGDVL FIPALWFHNV ISEEFGVGVN IFWKHLPSEC 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.