

**TYW5, 1-315aa, Human, His tag, E.coli**

**Cat.NO.: TP04367**

3th Edition

**Synonyms:**tRNA wybutosine-synthesizing protein 5, C2orf60, Htyw5

**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-( $\alpha$ -amino- $\alpha$ -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.

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

**Molecular Weight:**38.9kDa (338aa), confirmed by MALDI-TOF

**Sequences:**

MGSSHHHHHSSGLVPRGSHMGSMAGQHLPVPRLEGVSREQFMQHLYPQRKPLVLEGIDLGPCTSKWTVDYLS  
QVGGKKEVKIHVAAVAQMDFISKNFVYRTLFPDQLVQRAAEEKHKEFFVSEDEKYYLRSLGEDPRKDVADIRKQFP  
LLKGDIKFPEFFKEEQFFSSVFRISSPGLQLWTHYDVMNLLIQVTGKKRVVLFSPRDAQYLYLKGTKSEVLNIDNPD  
LAKYPLFSKARRYECSLEAGDVLFPALWFHNVISEEFGVGVNIFWKHLPSECYDKTDTYGNKDPTAASRAAQILDR  
ALKTLAELPEEYRDFYARRMVLHIQDKAYSKNSE

**Purity:**> 95% by HPLC

**Concentration:**1 mg/ml (determined by Bradford assay)

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.