

Recombinant E.coli udp protein

Catalog Number: ATGP0661

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-253aa

UniProt No.

P12758

NCBI Accession No.

NP_418275

Alternative Names

Uridine phosphorylase, UrdPase, Upase

PRODUCT SPECIFICATION

Molecular Weight

29.3 kDa (273aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 1mM DTT, 50mM NaCl

Purity

> 95% by SDS-PAGE

Biological Activity

Specific activity is > 20,000pmol/min/ug, and is defined as the amount of enzyme that catalyze the reduction 1.0pmole of uridine presence of phosphate per minute at pH 7.5 at 25C.

Tag

His-Tag

Application

SDS-PAGE, Enzyme Activity

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

uridine phosphorylase (uDP) catalyzes the reversible phosphorylytic cleavage of uridine and deoxyuridine to uracil and ribose- or deoxyribose-1-phosphate. The produced molecules are then utilized as carbon and energy sources or in the rescue of pyrimidine bases for nucleotide synthesis. This enzyme belongs to the family of

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glycosyltransferases, specifically the pentosyltransferases. The systematic name of this enzyme class is uridine:phosphate alpha-D-ribosyltransferase. Other names in common use include pyrimidine phosphorylase, urdPase, uPH, and uPase. Recombinant E. coli uDP protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

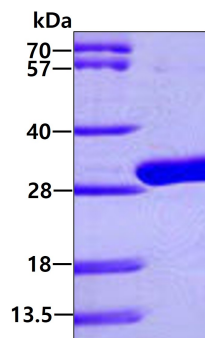
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TTWRAELDGG PVIVCSTGIG GPSTSIAVEE LAQLGIRTFLL RIGTTGAIQP HINVGDLVLT TASVRLDGAS LHFAPLEFPA
VADFECTTAL VEAAKSIGAT THVGV TASSD TFYPGQERYD TYSGRVVRHF KGSMEEWQAM GVMNYEMESA TLLTMCASQG
LRAGMVAGVI VNRTQQEIPN AETMKQTESH AVKIVVEAAR RLL

General References

Burling F.T., et al. (2003) Acta Crystallogr. 59:73-76
Walton L., et al (1989) Nucleic Acids Res. 17(16):6741.

DATA

SDS-PAGE



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