Recombinant human UPP1 protein

Catalog Number: ATGP0707

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-310aa

UniProt No.
Q16831

NCBI Accession No.
NP_853628

Alternative Names
uridine phosphorylase 1, uP, uPASE, uPP, urdPase 1

PRODUCT SPECIFICATION

Molecular Weight
36 kDa (330aa) confirmed by MALDI-TOF

Concentration
0.25mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 40% glycerol, 200mM NaCl

Purity
> 90% 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
uridine phosphorylase 1, also known as uPP1 catalyses the reversible phosphorolysis of uridine to uracil. The reaction products are then utilized as carbon and energy sources, or in the rescue of pyrimidine bases for nucleotide synthesis. The expression levels and the enzymatic activity of uPP1 are higher in human solid tumors than in adjacent normal tissues. In addition, uPP1 controls the homeostatic regulation of uridine concentration in plasma and tissues and plays a role in the intracellular activation of 5-fluorouracil. Recombinant human uPP1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional

chromatography techniques.

Amino acid Sequence

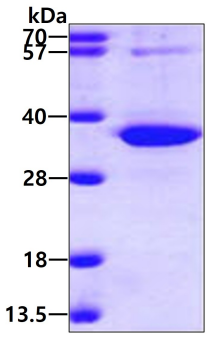
<MGSSHHHHHH SSGLVPRGSH> MAATGANAEK AESHNDCPVR LLNPNIAKMK EDILYHFNLT TSRHNFPALF GDVKFVCVGG SPSRMKAFIR CVGAELGLDC PGRDYPNICA GTDRYAMYKV GPVLSVSHGM GIPSISIMLH ELIKLLYYAR CSNVTIIRIG TSGGIGLEPG TVVITEQAVD TCFKAEFEQI VLGKRVIRKT DLNKKLVQEL LLCSAELSEF TTVVGNTMCT LDFYEGQGRL DGALCSYTEK DKQAYLEAAY AAGVRNIEME SSVFAAMCSA CGLQAAVVCV TLLNRLEGDQ ISSPRNVLSE YQQRPQRLVS YFIKKKLSKA

General References

Kanzaki A., et al. (2002) Int J Cancer. 97(5):631-5.
Russll RL., et al. (2001) J Biol Chem. 276(16):13302-7.

DATA

SDS-PAGE



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