

# Recombinant human UMPS protein

Catalog Number: ATGP3659

## PRODUCT INFORMATION

---

### Expression system

Baculovirus

### Domain

1-480aa

### UniProt No.

P11172

### NCBI Accession No.

NP\_000364.1

### Alternative Names

Uridine 5'-monophosphate synthase, UMPS, OPRT

## PRODUCT SPECIFICATION

---

### Molecular Weight

53 kDa (486aa)

### Concentration

0.25mg/ml (determined by absorbance at 280nm)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 30% glycerol

### Purity

> 95% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### 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

UMPS, also known as uridine 5'-monophosphate synthase, is a bifunctional enzyme catalyzing the last two steps of de novo pyrimidine biosynthesis. It is an indispensable component in this metabolic pathway and is a target for antimalarial and antitumor drugs. Its expression in colorectal carcinoma tissues is not correlated with the toxicities of 5-FU-based regimen, but It in the normal tissues can help predict the toxicities associated with 5-FU.

# Recombinant human UMPS protein

Catalog Number: ATGP3659

Recombinant human UMPS, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

## Amino acid Sequence

MAVARAALGP LVTGLYDVQA FKFGDFVLKS GLSSPIYIDL RGIVSRPRL SQVADILFQT AQNAGISFDT VCGVPYTALP  
LATVICSTNQ IPMLIRRKET KDYGTKRLVE GTINPGETCL IIEDVVTSQS SVLETVEVLQ KEGLKVTDAI VLLDREQGGK  
DKLQAHGIRL HSVCTLSKML EILEQQKKVD AETVGRVKRF IQENVFVAAN HNGSPLSIKE APKELSFGAR AELPRIHPVA  
SKLLRLMQKK ETNLCLSADV SLARELLQLA DALGPSICML KTHVDILNDF TLDVMKELIT LAKCHEFLIF EDRKFADIGN  
TVKKQYEGGI FKIASWADLV NAHVVPGSGV VKGLQEVGLP LHRGCLLIAE MSSTGSLATG DYTRAAVRMA EEHSEFVVGF  
ISGSRVSMKP EFLHLTPGVQ LEAGGDNLGQ QYNPQEVIG KRGSDIIVG RGIISAADRL EAAEMYRKA WEA YLSRLGV  
<HHHHHH>

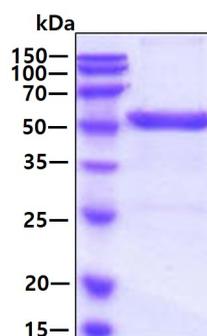
## General References

Zhang Y., et al. (2013) J Biol Chem. 288:34746-34754.

Dong Q., et al. (2012) Nan Fang Yi Ke Da Xue Xue Bao. 32:1179-1181.

## DATA

### SDS-PAGE



3 $\mu$ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.