

# Recombinant human TPK1 protein

Catalog Number: ATGP1415

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-243aa

### UniProt No.

Q9H3S4

### NCBI Accession No.

NP\_071890

### Alternative Names

Thiamin pyrophosphokinase 1, HTPK1, PP20

## PRODUCT SPECIFICATION

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### Molecular Weight

29.8 kDa (267aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

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

### 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

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### Description

TPK1, also known as thiamin pyrophosphokinase 1, catalyzes the phosphorylation of thiamine to thiamine pyrophosphate. This protein can also catalyze the phosphorylation of pyrithiamine to pyrithiamine pyrophosphate. Recombinant human TPK1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

### Amino acid Sequence

MGSSHHHHHH SGLVPRGSH MGSMEHAFT PLEPLLSTGN LKYCLVILNQ PLDNYFRHLW NKALLRACAD GGANRLYDIT

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EGERESFLPE FINGDFDSIR PEVREYYATK GCELISTPDQ DHTDFTKCLK MLQKKIEEKD LKVDVIVTLG GLAGRFDQIM  
ASVNTLFQAT HITPFPIII QEESLIYLLQ PGKHRLHVDT GMEGDWCGLI PVGQPCMQVT TTGLKWNLTN DVLAFGTLVS  
TSNTYDGSV VTVETDHPLL WTMAIKS

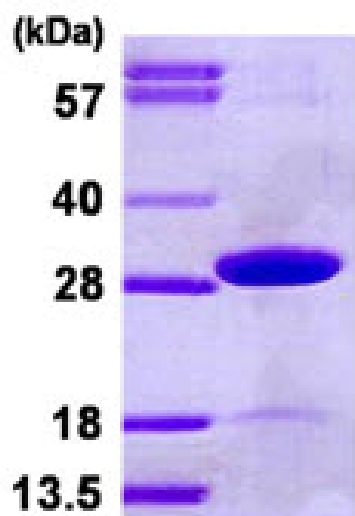
## General References

Nosaka K., et al. (2001) *Biochim. Biophys. Acta.* 1517:293-297

Zhao R., et al. (2004) *Biochim. Biophys. Acta.* 1517:320-322

## DATA

### SDS-PAGE



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

15% SDS-PAGE (3 $\mu$ g)