# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 1-243aa

**UniProt No.** Q9H3S4

NCBI Accession No. NP\_071890

Alternative Names Thiamin pyrophosphokinase 1, HTPK1, PP20

# **PRODUCT SPECIFICATION**

**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

#### 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 SSGLVPRGSH MGSH>MEHAFT PLEPLLSTGN LKYCLVILNQ PLDNYFRHLW NKALLRACAD



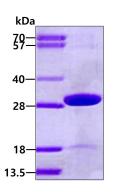
GGANRLYDIT EGERESFLPE FINGDFDSIR PEVREYYATK GCELISTPDQ DHTDFTKCLK MLQKKIEEKD LKVDVIVTLG GLAGRFDQIM ASVNTLFQAT HITPFPIIII QEESLIYLLQ PGKHRLHVDT GMEGDWCGLI PVGQPCMQVT TTGLKWNLTN DVLAFGTLVS TSNTYDGSGV VTVETDHPLL WTMAIKS

#### **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**



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