

## 32-3127: TPK1 Recombinant Protein

**Alternative Name :** Thiamin pyrophosphokinase 1,hTPK1,Placental protein 20,PP20,Thiamine pyrophosphokinase 1,TPK1,THMD5.

### Description

Source : Escherichia Coli. TPK1 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 267 amino acids (1-243 a.a.) and having a molecular mass of 29.8kDa.TPK1 is fused to a 24 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques. Thiamin pyrophosphokinase 1 (TPK1) is a homodimer which catalyzes the phosphorylation of thiamine to thiamine pyrophosphate. TPK1 is found in the heart, kidney, testis, small intestine and peripheral blood leukocytes, and at very low levels in a variety of tissues. TPK1 gene defects cause the thiamine metabolism dysfunction syndrome type 5, episodic encephalopathy type (THMD5), which is an autosomal recessive metabolic disorder due to an inborn error of thiamine metabolism.

### Product Info

**Amount :** 20 µg  
**Purification :** Greater than 90.0% as determined by SDS-PAGE.  
**Content :** TPK1 protein solution (1mg/ml) containing 20mM Tris-HCl buffer (pH8.0), 20% glycerol and 1mM DTT.  
**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Avoid multiple freeze-thaw cycles.  
**Amino Acid :** MGSSHHHHHH SGLVPRGSH MGSMEHAFT PLEPLLSTGN LKYCLVILNQ PLDNYFRHLW  
NKALLRACAD GGANRLYDIT EGERESFLPE FINGDFDSIR PEVREYYATK GCELISTPDQ DHTDFTKCLK  
MLQKKIEEKD LKVDVIVTLG GLAGRFDQIM ASVNTLFQAT HITPFPIIIIIQEEESLIYLLQ PGKHLHVDL  
GMEGDWCGLI PVGQPCMQVT TTGLKWNLTN DVLAFTLVLS TSNTYDGSV VTVTDHPLL WTMAIKS.