

# PGK1, human recombinant

**CATALOG #:** 7819-100 100 µg

**ALTERNATE NAMES:** Phosphoglycerate kinase 1, MGC117307, MGC142128, MGC8947, MIG10, PGKA

**SOURCE:** E. Coli

**PURITY:** > 95% by SDS - PAGE

**MOL. WEIGHT:** 46.8 kDa (437 aa, 1-417 aa + His Tag)

**FORM:** Liquid

**FORMULATION:** 1 mg/ml solution in 20 mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, and 1 mM DTT

**ENDOTOXIN LEVEL:** < 1.0 EU/µg of protein (determined by LAL method)

**STORAGE CONDITIONS:**

Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

**DESCRIPTION:**

Phosphoglycerate kinase 1 (PGK1) is an X-linked enzyme that plays a key role in the glycolytic pathway. The gene encoding the erythrocyte enzyme PGK1 and it seems that PGK-1 acts as a polymerase alpha cofactor protein (primer recognition protein) as a glycolytic enzyme role. The PGK1 catalyzes the reversible conversion of 1, 3-diphosphoglycerate to 3-phosphoglycerate during glycolysis, generating one molecule of ATP. Recombinant PGK1 protein was expressed in E.coli and purified by using conventional chromatography techniques.

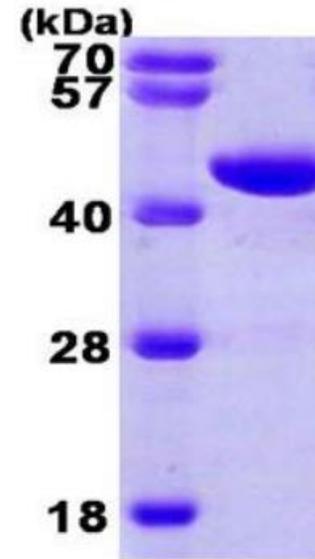
**AMINO ACID SEQUENCE:**

MGSSHHHHHHH SGLVPRGSH MSLSNKLTLD KLDVKGKRVV MRVDFNVPMK  
 NNQITNNQRI KAAVPSIKFC LDNGAKSVVL MSHLGRPDGV PMPDKYSLEP VAVELKSLLG  
 KDVLFLKDCV GPEVEKACAN PAAGSVILLE NLRFHVEEEG KGKDASGNKV KAEPKIEAF  
 RASLSKLGDV YVNDAFGTAH RAHSSMVGVN LPQKAGGFLM KKELNYFAKA  
 LESPERPFLA ILGGAKVADK IQLINMLDK VNEMIIGGGM AFTFLKVLNN MEIGTSLFDE  
 EGAKIVKDLML SKAEKNGVKI TLPVDFVTAD KFDENAKTGQ ATVASGIPAG WMGLDCGPES

SKKYAEAVTR AKQIVWNGPV GVFEWEAFAR GTKALMDEVV KATSRGCITI IGGGDATCC  
 AKWNTEDKVS HVSTGGGASL ELLEGKVLPG VDALSNI

**BIOLOGICAL ACTIVITY:**

Specific activity is >190 units/mg One unit will convert 1.0 µmole of beta-NADH per minute in a coupled system with GAPDH at pH 8.0 at 25°C



15% SDS-PAGE (3µg)

Human Recombinant PGK1

**RELATED PRODUCTS:**

- PGK2, human recombinant (Cat. No. 7820-50)
- 2-Phosphoglycerate Colorimetric/Fluorometric Assay Kit (Cat. No. K778-100)

**FOR RESEARCH USE ONLY! Not to be used in humans.**

