

# Recombinant human PGK1 protein

Catalog Number: ATGP0355

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-417aa

### UniProt No.

P00558

### NCBI Accession No.

NP\_000282.1

### Alternative Names

Phosphoglycerate kinase 1, Cell migration-inducing gene 10 protein, Primer recognition protein 2, PRP 2, PGKA, MIG10

## PRODUCT SPECIFICATION

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### Molecular Weight

46.8 kDa (437aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 1mM DTT

### 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

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### 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 glyxolytic enzyme role. The PGK1 catalyzes the reversible conversion of

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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

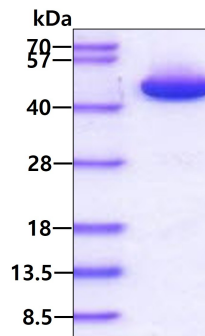
<MGSSHHHHHH SSGLVPRGSH> MSLSNKLTLD KLDVKGKRVV MRVDFNVPMK NNQITNNQRI KAAVPSIKFC  
LDNGAKSVVL MSHLGRPDGV PMPDKYSLEP VAVELKSLLG KDVLFLKDCV GPEVEKACAN PAAGSVILLE NLRFHVEEEG  
KGKDASGNKV KAEPKIEAF RASLSKLGDV YVNDAFGTAH RAHSSMVGVN LPQKAGGFLM KKELNYFAKA LESPERPFLA  
ILGGAKVADK IQLINMLDK VNEMIIGGGM AFTFLKVLNN MEIGTSLFDE EGAKIVKDLM SKAEKNGVKI TLPVDFVTAD  
KFDENAKTGQ ATVASGIPAG WMGLDCGPES SKKYAEAVTR AKQIVWNGPV GVFEWEAFAR GTKALMDEVV KATSRGCITI  
IGGGDTATCC AKWNTEDKVS HVSTGGGASL ELLEGKVLPG VDALSNI

## General References

Svaasand EK., et al. (2007) *Muscle Nerve*. 36(5):679-84.  
Valentin C., et al. (1998) *Hum Mutat*. 12(4):280-7.

## DATA

### SDS-PAGE



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