Recombinant human PGK1 protein

Catalog Number: ATGP3249

PRODUCT INFORMATION

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

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)

Biological Activity
Specific activity: > 600unit/mg. One unit will convert 1 umole of 1,3-Bisphosphoglycerate to 3-PGA per minute at pH 8.0 at 37C.

Tag
His-Tag

Application
SDS-PAGE, Enzyme Activity

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.

Recombinant human PGK1 protein

Catalog Number: ATGP3249

BACKGROUND

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 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

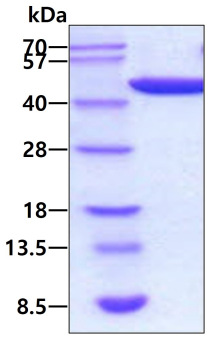
<MGSSHHHHHH SSGLVPRGSH> MSLSNKLTLD KLDVKGKRVV MRVDFNVPMK NNQITNNQRI KAAVPSIKFC LDNGAKSVVL MSHLGRPDGV PMPDKYSLEP VAVELKSLLG KDVLFLKDCV GPEVEKACAN PAAGSVILLE NLRFHVEEEG KGKDASGNKV KAEPAKIEAF RASLSKLGDV YVNDAFGTAH RAHSSMVGVN LPQKAGGFLM KKELNYFAKA LESPERPFLA ILGGAKVADK IQLINNMLDK VNEMIIGGGM AFTFLKVLNN MEIGTSLFDE 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



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