PRODUCT INFORMATION

Expression system E.coli

Domain 1-259aa

UniProt No. P07738

NCBI Accession No. NP_001715

Alternative Names

Bisphosphoglycerate mutase, BPG-dependent PGAM, Bisphosphoglycerate mutase 2,3-bisphosphoglycerate mutase, erythrocyte, 2,3-bisphosphoglycerate mutase, 2,3-bisphosphoglycerate synthase, Ab2 098, Al323730 AL022789, BPG dependent PGAM, C86192.

PRODUCT SPECIFICATION

Molecular Weight

31 kDa (267aa) confirmed by MALDI-TOF

Concentration

0.5mg/ml (determined by Bradford assay)

Formulation

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

Purity

> 95% 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

Bisphosphoglycerate mutase (BPGM) is an enzyme unique to erythrocytes and placental cells. This protein plays a major role in regulating hemoglobin oxygen affinity as a consequence of controlling 2, 3-BPG concentration. It is responsible for the catalytic synthesis of 2, 3-Bisphosphoglycerate (2, 3-BPG) from 1, 3-BPG. BPGM also has a mutase and a phosphatase function, but these are much less active. Recombinant human BPGM, fused to His-tag



at C-terminus, was expressed in E. coli and purified by using conventional chromatography techniques

Amino acid Sequence

MSKYKLIMLR HGEGAWNKEN RFCSWVDQKL NSEGMEEARN CGKQLKALNF EFDLVFTSVL NRSIHTAWLI LEELGQEWVP VESSWRLNER HYGALIGLNR EQMALNHGEE QVRLWRRSYN VTPPPIEESH PYYQEIYNDR RYKVCDVPLD QLPRSESLKD VLERLLPYWN ERIAPEVLRG KTILISAHGN SSRALLKHLE GISDEDIINI TLPTGVPILL ELDENLRAVG PHQFLGDQEA IQAAIKKVED QGKVKQAKKL EHHHHHH

General References

Pritlove DC., et al. (2006) Placenta. 27(8):924-7 Wang Y., et al. (2006) J. Biol. Chem. 281(51):39642-8.

DATA

SDS-PAGE



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

15% SDS-PAGE (3ug)₽

