Recombinant human RPIA protein

Catalog Number: ATGP1356

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-311aa

UniProt No.
P49247

NCBI Accession No.
NP_653164.2

Alternative Names
Ribose 5-phosphate isomerase, Phosphoriboisomerase, RPI

PRODUCT SPECIFICATION

Molecular Weight
35.4 kDa (331aa) confirmed by MALDI-TOF

Concentration
0.25mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 2mM DTT, 40% glycerol, 200mM NaCl, 2mM EDTA, 0,2mM PMSF

Purity
> 90% 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
RPIA (Ribose-5-phosphate isomerase) belongs to the ribose 5-phosphate isomerase family. RPIA is an enzyme that catalyzes the conversion between ribose-5-phosphate (R5P) and ribulose-5-phosphate (Ru5P). RPI exists as two distinct proteins forms, termed RPIA and RPIB. RPIA plays an essential role in the metabolism of plants and animals, as it is involved in the Calvin cycle which takes place in plants, and the pentose phosphate pathway which takes place in plants as well as animals. Recombinant human RPIA protein, fused to His-tag at N-terminus,

was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

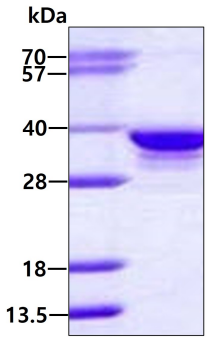
<MGSSHHHHHH SSGLVPRGSH> MQRPGPFSTL YGRVLAPLPG RAGGAASGGG GNSWDLPGSH VRLPGRAQSG TRGGAGNTST SCGDSNSICP APSTMSKAEE AKKLAGRAAV ENHVRNNQVL GIGSGSTIVH AVQRIAERVK QENLNLVCIP TSFQARQLIL QYGLTLSDLD RHPEIDLAID GADEVDADLN LIKGGGGCLT QEKIVAGYAS RFIVIADFRK DSKNLGDQWH KGIPIEVIPM AYVPVSRAVS QKFGGVVELR MAVNKAGPVV TDNGNFILDW KFDRVHKWSE VNTAIKMIPG VVDTGLFINM AERVYFGMQD GSVNMREKPF C

General References

Zhang, R., et al. (2003) Structure 11 (1): 31.
Huck J.H.J., et al. (2004) Am. J. Hum. Genet. 74:745-751

DATA

SDS-PAGE



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