PRODUCT INFORMATION

Expression system E.coli

Domain 1-531aa

UniProt No. P52480

NCBI Accession No. NP_035229

Alternative Names

Pyruvate kinase PKM isoform M2, Pyruvate kinase muscle isozyme, pyruvate kinase M1/2, Threonine-protein kinase PKM2, Tyrosine-protein kinase PKM2, Pk3, Pkm2, Pykm

PRODUCT SPECIFICATION

Molecular Weight

60.2 kDa (554aa) Confirmed by MALDI-TOF

Concentration

0.5mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH8.5) containing 0.2M NaCl, 1mM DTT, 30% glycerol

Purity > 85% by SDS-PAGE

Biological Activity

Specific activity: > 50,000pmol/min/ug. One unit will convert 1.0pmole of phospho(enol)pyruvate to pyruvate per minute at pH 7.5 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.

BACKGROUND

Description

Pkm, also known as pyruvate kinase PKM isoform M2, is an isoenzyme of the glycolytic enzyme pyruvate kinase. This protein catalyzes the production of pyruvate and ATP from phosphoenolpyruvate. Pkm interacting with Opa



proteins, a bacterial outer membrane protein involved in gonococcal adherence to and invasion of human cells, is required for bacterial pathogenesis. It is specifically expressed at high levels in tumor cells, and can be measured in plasma of patients with advanced breast cancer. Recombinant mouse Pkm, fused to His-tag at Nterminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MGSMPKPHSE AGTAFIQTQQ LHAAMADTFL EHMCRLDIDS APITARNTGI ICTIGPASRS VEMLKEMIKS GMNVARLNFS HGTHEYHAET IKNVREATES FASDPILYRP VAVALDTKGP EIRTGLIKGS GTAEVELKKG ATLKITLDNA YMEKCDENIL WLDYKNICKV VEVGSKIYVD DGLISLQVKE KGADFLVTEV ENGGSLGSKK GVNLPGAAVD LPAVSEKDIQ DLKFGVEQDV DMVFASFIRK AADVHEVRKV LGEKGKNIKI ISKIENHEGV RRFDEILEAS DGIMVARGDL GIEIPAEKVF LAQKMMIGRC NRAGKPVICA TQMLESMIKK PRPTRAEGSD VANAVLDGAD CIMLSGETAK GDYPLEAVRM QHLIAREAEA AIYHLQLFEE LRRLAPITSD PTEAAAVGAV EASFKCCSGA IIVLTKSGRS AHQVARYRPR APIIAVTRNP QTARQAHLYR GIFPVLCKDA VLNAWAEDVD LRVNLAMDVG KARGFFKKGD VVIVLTGWRP GSGFTNTMRV VPVP

General References

Spoden GA., et al. (2009). Exp Cell Res. 315(16):2765-74 Mazurek S., et al. (2007). Ernst Schering Found Symp Proc. (4):99-124.





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

15% SDS-PAGE (3ug)

