

Recombinant human Hexokinase 3 protein

Catalog Number: HXK0701

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-923aa

UniProt No.

P52790

NCBI Accession No.

NP_002106.2

Alternative Names

HK3, Hexokinase 3, EC 2.7.1.1, Hexokinase type III, HK III, Hexokinase-3, HKIII, Hexokinase3, HK3, HXK3.

PRODUCT SPECIFICATION

Molecular Weight

101.1 kDa (943aa)

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 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

Hexokinase is the first enzyme in the glycolytic pathway, catalyzing the transfer of a phosphoryl group from ATP to glucose to form glucose-6-phosphate and ADP. In mammals, four distinct enzymes-types 1 to 4 hexokinases have been identified. The enzyme is found in most cells, but there is tissue specificity for the particular type of hexokinase. Hexokinase3 lacks the hydrophobic N-terminal sequence critical for targeting to mitochondria. Hexokinase3 may have anabolic functions, providing H6P for glycogen or lipid synthesis. Recombinant human Hexokinase3, fused to His tag at N-terminus, was expressed in E. coli and purified by using conventional

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chromatography techniques.

Amino acid Sequence

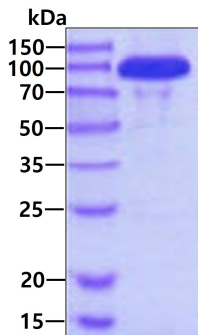
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VMLGAGQQLF DFAAHCLSEF LDAQPVNKQG LQLGFSFSFP CHQTGLDRST LISWTKGFRC SGVEGQDVVQ LLRDAIRRQG
AYNIDVVAVV NDTVGTMMGC EPGVRPCEVG LVVDTGTNAC YMEEARHVAV LDEDGRVVCV SVEWGSFSDD
GALGPVLTTF DHTLDHESLN PGAQRFKMI GGLYLGELVR LVLHLARCG VLFGGCTSPA LLSQGSILLE HVAEMEDPST
GAARVHAILQ DLGLSPGASD VELVQHVCAA VCTRAAQLCA AALAAVLSCL QHSREQQTLQ VAVATGGRVC ERHPRFCSVL
QGTVMMLAPE CDVSLIPSVD GGGRGVAMVT AVAARLAAHR RLLLETLAPF RLNHDQLAAV QAQMRKAMAK GLRGEASSLR
MLPTFVRATP DGSEGRDFA LDLGGTNFRV LLVRVTTGVQ ITSEIYSIPE TVAQGGGQQL FDHIVDCIVD FQKQGLSGQ
SLPLGFTFSF PCRQLGLDQG ILLNWTGFK ASDCEGQDVV SLLREAITRR QAVELNVVAI VNDTVGTMMMS CGYEDPRCEI
GLIVGTGTNA CYMEELRNVA GVPGDSGRMC INMEWGAFGD DGSLAMLSTR FDASVDQASI NPGKQRFKEM ISGMYLGEIV
RHILLHLTSL GVLFRGQQIQ RLQTRDIFKT KFLSEIESDS LALRQVRAIL EDLGLPLTSD DALMVLEVCQ AVSQRAAQLC
GAGVAAVVEK IRENRLGLEEL AVSVGVDGTL YKLHPRFSSL VAATVRELAP RCVVTFLLQSE DGSGKGAALV TAVACRLAQL
TRV

General References

Jon E. et al.,(2003) J.Exp Biology. 206 : 2049-2057
Furuta H. et al.,(1996) Genomics. 1996
36(1):206-9.

DATA

SDS-PAGE



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