

Recombinant Full Length Human hexokinase 2 Protein, His tagged

Cat. No. HK2-41H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human Hexokinase 2 (Full Length), fused to His tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.
Species	Human
Source	E.coli
ProteinLength	1-917aa
Description	Hexokinases phosphorylate glucose to produce glucose-6-phosphate, the first step in most glucose metabolism pathways. This gene encodes hexokinase 2, the predominant form found in skeletal muscle. It localizes to the outer membrane of mitochondria. Expression of this gene is insulin-responsive, and studies in rat suggest that it is involved in the increased rate of glycolysis seen in rapidly growing cancer cells.
Tag	N-His
Form	Liquid
Bio-activity	> 12,000 pmol/min/μg. One unit will convert 1pmole of D-Glucose to D-Glucose-6-phosphate per minute at pH8.0 at 37 centigrade.
Molecular Mass	104.1 kDa (937aa)

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

AA Sequence

MIASHLLAYFFTELNHDQVQKVDQYLYHMRLSDETLLEISKRFRKEMEKGLGATTHP
 TAAVKMLPTFVRSTPDGTEHGEFLALDLGGTNFRVLWVKVTDNGLQKVEMENQIYAI
 PEDIMRGSGTQLFDHIAECLANFMDKLQIKDKKLPLGFTFSFPCHQTKLDESFLVSW
 TKGFKSSGVEGRDVALIRKAIQRRGDFDIDIVAVVNDTVGTMMTTCGYDDHNCEIGLI
 VGTGSNACYMEEMRHIDMVEGDEGRMCINMEWGAFGDDGSLNDIRTEFDQEIDMG
 SLNPGKQLFEKMISGMYMGELVRLILVKMAKEELLFGGKLSPELLNTGRFETKDISDI
 EGEKDGIRKAREVLMRLGLDPTQEDCVATHRICQIVSTRSASLCAATLAAVLQRIKEN
 KGEERLRSTIGVDGSVYKKHPHFAKRLHKTVRRLVPGCDVRFLRSEDGSGKGAAMV
 TAVAYRLADQHRARQKTLEHLQLSHDQLLEVKKRMKVEMERGLSKETHASAPVKML
 PTYVCATPDGTEKGDFLALDLGGTNFRVLLVRVRNGKWGGVEMHNKIYAIPQEVMMH
 GTGDELFDHIVQCIADFLEYMGMGVSLPLGFTFSFPCQQNSLDESILLKWTGKFKA
 SGCEGEDVVTLLKEAIHRREEFDLDVVAVVNDTVGTMMTTCGFEDPHCEVGLIVGTG
 SNACYMEEMRNVELVEGEEGRMCVNMWGAFGDNGCLDDFRTEFDVAVDELSLN
 PGKQRFKEMISGMYLGEIVRNILIDFTKRGLLFRGRISERLKTRGIFETKFLSQIESDCL
 ALLQVRAILQHLGLESTCDDSIIVKEVCTVVARRAAQLCGAGMAAVVDRIENRGLDA
 LKVTVGVDGTYKLHPHFAKVMHETVKDLAPKCDVSFLQSEDGSGKGAALITAVACR
 IREAGQR

Purity

> 85% by SDS-PAGE

Applications

SDS-PAGE, Enzyme Activity

Storage

Can be stored at +2 to +8 centigrade for 1 week. For long term storage, aliquot and store at -20 to -80 centigrade. Avoid repeated freezing and thawing cycles.

Concentration

1 mg/mL (determined by Bradford assay)

Storage Buffer

20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol

Notes

For research use only. This product is not intended or approved for human,

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diagnostics or veterinary use.

References

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

GENE INFORMATION

Gene Name HK2 hexokinase 2 [Homo sapiens (human)]

Official Symbol HK2

Synonyms

HK2; hexokinase 2; HKII; HXK2; hexokinase-2; hexokinase type II; hexokinase-2, muscle; hexokinase-B; muscle form hexokinase; EC 2.7.1.1

Gene ID 3099

mRNA Refseq NM_000189

Protein Refseq NP_000180

MIM 601125

UniProt ID P52789

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