Active Recombinant Human HK1 Protein, His-tagged

Cat. No. HK1-1141H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human HK1 Protein (1-917 aa) is produced by E. coli expression system. This protein is fused with a His-tag.
Species	Human
Source	E.coli
ProteinLength	1-917 aa
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. Hexokinase1 is found in the adipose tissue and liver and encodes a ubiquitous form of hexokinase which localizes to the outer membrane of mitochondria. Mutations in this hexokinase1 have been associated with hemolytic anemia due to hexokinase deficiency. Recombinant human Hexokinase1, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.
Form	Liquid. In 20mM Tris-HCl pH8.0, 10% glycerol
Bio-activity	Specific activity is > 8,000 pmol/min/ug. One unit will convert 1 pmoles of D-Glucose to D-Glucose-6-phosphate per minute at pH 7.5 at 37 centigrade.

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

Molecular Mass	104.6 kDa
AA Sequence	MGSSHHHHHH SSGLVPRGSH MIAAQLLAYY FTELKDDQVK KIDKYLYAMR LSDETLIDIM TRFRKEMKNG LSRDFNPTAT VKMLPTFVRS IPDGSEKGDF IALDLGGSSF RILRVQVNHE KNQNVHMESE VYDTPENIVH GSGSQLFDHV AECLGDFMEK RKIKDKKLPV GFTFSFPCQQ SKIDEAILIT WTKRFKASGV EGADVVKLLN KAIKKRGDYD ANIVAVVNDT VGTMMTCGYD DQHCEVGLII GTGTNACYME ELRHIDLVEG DEGRMCINTE WGAFGDDGSL EDIRTEFDRE IDRGSLNPGK QLFEKMVSGM YLGELVRLIL VKMAKEGLLF EGRITPELLT RGKFNTSDVS AIEKNKEGLH NAKEILTRLG VEPSDDDCVS VQHVCTIVSF RSANLVAATL GAILNRLRDN KGTPRLRTTV GVDGSLYKTH PQYSRRFHKT LRRLVPDSDV RFLLSESGSG KGAAMVTAVA YRLAEQHRQI EETLAHFHLT KDMLLEVKKR MRAEMELGLR KQTHNNAVVK MLPSFVRRTP DGTENGDFLA LDLGGTNFRV LLVKIRSGKK RTVEMHNKIY AIPIEIMQGT GEELFDHIVS CISDFLDYMG IKGPRMPLGF TFSFPCQQTS LDAGILITWT KGFKATDCVG HDVVTLLRDA IKRREEFDLD VVAVVNDTVG TMMTCAYEEP TCEVGLIVGT GSNACYMEEM KNVEMVEGDQ GQMCINMEWG AFGDNGCLDD IRTHYDRLVD EYSLNAGKQR YEKMISGMYL GEIVRNILID FTKKGFLFRG QISETLKTRG IFETKFLSQI ESDRLALLQV RAILQQLGLN STCDDSILVK TVCGVVSRRA AQLCGAGMAA VVDKIRENRG LDRLNVTVGV DGTLYKLHPH FSRIMHQTVK ELSPKCNVSF LLSEDGSGKG AALITAVGVR LRTEASS
Purity	> 90% by SDS - PAGE
Applications	Enzyme Activity; SDS-PAGE

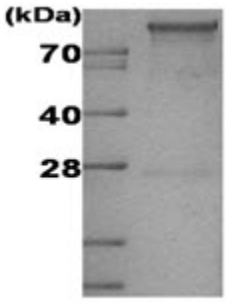
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Storage	Can be stored at +2 centigrade to +8 centigrade for 1 week. For long term storage, aliquot and store at -20 centigrade to -80 centigrade. Avoid repeated freezing and thawing cycles.
Concentration	1 mg/ml (determined by Bradford assay)

GENE INFORMATION

Gene Name	HK1 hexokinase 1 [Homo sapiens]
Official Symbol	HK1
Synonyms	HK1; hexokinase 1; hexokinase-1; HK I; glycolytic enzyme; hexokinase type I; HKI; HXK1; HK1-ta; HK1-tb; HK1-tc;
Gene ID	3098
mRNA Refseq	NM_000188
Protein Refseq	NP_000179
MIM	142600
UniProt ID	P19367

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12% SDS-PAGE (3ug)

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

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