

## Active Recombinant Human HK1 Protein, His-tagged

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

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human HK1 Protein (1-917 aa) is produced by E. coli expression system. This protein is fused with a His-tag.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	1-917 aa
<b>Description</b>	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.
<b>Form</b>	Liquid. In 20mM Tris-HCl pH8.0, 10% glycerol
<b>Bio-activity</b>	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.

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**Molecular Mass** 104.6 kDa

**AA Sequence**


MGSSHHHHHH SSGLVPRGSH MIAAQLLAYY FTELKDDQVK KIDKYLYAMR  
 LSETLIDIM TRFRKEMKNG LSRDFNPTAT VKMLPTFVRS IPDGSEKGF  
 IALDLGGSSF RILRVQVNHE  
 KNQNVHMESE VYDTPENIVH GSGSQLFDHV AECLGDFMEK RKIKDKKLPV  
 GFTFSFPCQQ SKIDEAILIT WTKRFKASGV EGADVVKLLN KAIKKRGDYD  
 ANIVAVVNDT VGTMMTCGYD  
 DQHCEVGLII GTGTNACYME ELRHIDLVEG DEGRMCINTE WGAFGDDGSL  
 EDIRTEFDRE IDRGLNPGK QLFKEMVSGM YLGELVRLIL VKMAKEGLLF  
 EGRITPELLT RGKFNTSDVS  
 AIEKNKEGLH NAKEILTRLG VEPSDDDCVS VQHVCTIVSF RSANLVAATL  
 GAILNRLRDN KGTPRLRTTV GVDGSLYKTH PQYSRRFHKT LRRLVPDSDV  
 RFLSESGSG KGAAMTAVA  
 YRLAEQHRQI EETLAHFHLT KDMILLEVKKR MRAEMELGLR KQTHNNAVVK  
 MLPSFVRRTP DGTENGFLA LDLGGTNFRV LLVKIRSGKK RTVEMHNKIY  
 AIPIEIMQGT GEELFDHIVS  
 CISDFLDYMG IKGPRMPLGF TFSFPCQQTSLDAGILITWT KGFKATDCVG  
 HDVVTLLRDA IKRREEFDLD VVAVVNDTVG TMMTCAYEEP TCEVGLIVGT  
 GSNACYMEEM KNVEMVEGDQ  
 GQMCINMEWG AFGDNGCLDD IRTHYDRLVD EYSLNAGKQR YEKMISGMYL  
 GEIVRNILID FTKKGFLFRG QISETLKTRG IFETKFLSQI ESDRLALLQV  
 RAILQQLGLN STCDDSSILVK  
 TVCGVVSRRRA AQLCGAGMAA VVDKIRENRG LDRLNVTGVG DGTLYKLHPH  
 FSRIMHQTVK ELSPKCNVSF LLEDGSGKG 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

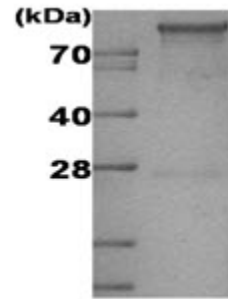
**MIM** 142600

**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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