

Product datasheet for TP300464

Hexokinase 1 (HK1) (NM_000188) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human hexokinase 1 (HK1), nuclear gene encoding mitochondrial protein, transcript variant 1, 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC200464 representing NM_000188 Red =Cloning site Green =Tags(s)

MIAAQLLAYFTELKDDQVKKIDKLYAMRLSDETLIDIMTRFRKEMKNGLSRDFNPTATVKMLPTFVRS
IPDGSEKGFIALDLGGSSFRILRVQVNHENQNVHMESEVYDTPENIVHGSGSQLFDHVAECLGDFMEK
RKIKDKKLPVGFTFSPCQQSKIDEAILITWTKRFKASGVEGADVWKLKAIKKRGDYDANIVAVVNDT
VGTMMTCGYDDQHCEVGLIIGTGTNACYMEELRHIDLVEGDEGRMCINTEWGAFGDDGSLEDIRTEFDRE
IDRGSNPGKQLFEKMVSGMYLGELVRLILVKMAKEGLLFEGRITPELLTRGKFNTSDVSAIEKNKEGLH
NAKEILTRLGVESDDDCVSVQHVCTIVSFRSANLVAATLGAILNRLRDNKGTPLRRTTVGVDGSLYKTH
PQYSRRFHKTLRRLVPDSDVRFLLSESGSGKGAAMVTAVAYRLAEQHRQIEETLAHFHLTKDMLLEVKKR
MRAEMELGLRKQTHNNAVVKMLPSFVRRTPDGTENGDFLALDLGGTNFRVLLVKIRSGKKRTVEMHNKI
Y
AIPIEIMQGTGEELFDHIVSCISDFLDYMGIKGPRMPLGFTFSFPCQQTSLDAGILITWTKGFKATDCVG
HDVVTLLRDAIKRREEFDLVAVVNDTVGTMMTCAYEPTCEVGLIVGTGNSACYMEEMKNVEMVEGD
Q
GQMCINMEWGAFGDNGCLDDIRTHYDRLVDEYSLNAGKQRYEKMISGMYLGEIVRNILIDFTKKGFLFRG
QISETLKTGRGIFETKFLSQIESDRLALLQVRAILQQLGLNSTCDD SILVKTVCVGSRRAAQLCGAGMAA
VVDKIRENRGLDRLNVTVGVDGTYKLHPHFSRIMHQTVKELSPKCNVSFLLSEDSGSGKGAALITAVGV
LRTEASS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

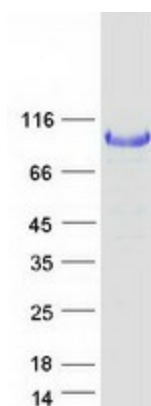
Tag:	C-Myc/DDK
Predicted MW:	102.3 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol



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Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_000179
Locus ID:	3098
UniProt ID:	P19367
RefSeq Size:	3580
Cytogenetics:	10q22.1
RefSeq ORF:	2751
Synonyms:	hexokinase; HK; HK1-ta; HK1-tb; HK1-tc; HKD; HKI; HMSNR; HXK1; NEDVIBA; RP79
Summary:	Hexokinases phosphorylate glucose to produce glucose-6-phosphate, the first step in most glucose metabolism pathways. This gene encodes a ubiquitous form of hexokinase which localizes to the outer membrane of mitochondria. Mutations in this gene have been associated with hemolytic anemia due to hexokinase deficiency. Alternative splicing of this gene results in several transcript variants which encode different isoforms, some of which are tissue-specific. [provided by RefSeq, Apr 2016]
Protein Families:	Druggable Genome
Protein Pathways:	Amino sugar and nucleotide sugar metabolism, Fructose and mannose metabolism, Galactose metabolism, Glycolysis / Gluconeogenesis, Insulin signaling pathway, Metabolic pathways, Starch and sucrose metabolism, Type II diabetes mellitus

Product images:



Coomassie blue staining of purified HK1 protein (Cat# TP300464). The protein was produced from HEK293T cells transfected with HK1 cDNA clone (Cat# [RC200464]) using MegaTran 2.0 (Cat# [TT210002]).