

Product datasheet for PH309482

Hexokinase II (HK2) (NM_000189) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	HK2 MS Standard C13 and N15-labeled recombinant protein (NP_000180)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC209482
Predicted MW:	102.2 kDa
Protein Sequence:	>RC209482 representing NM_000189 Red=Cloning site Green=Tags(s)

MIASHLLAYFFTELNHDQVQKVDQYLYHMRLSDETLLEISKRFKEMEKGLGATTHPTAAVKMLPTFVRS
TPDGTEHGEFLALDLGGTNFRVLWVKVTDNGLQKVENENQIYAIPEIDIMRSGTQLFDHIAECLANFMDK
LQIKDKKLPLGFTFSFPCHQTKLDESFLVSWTKGFKSSGVEGRDVVALIRKAIQRRGDFDIDIVAVVNDT
VGTMMTCGYDDHNCIEGLIVGTGSNACYMEEMRHIDMVEGDEGRMCINMEWGAFGDDGSLNDIRTEFDQE
IDMGSLNPGKQLFEKMISGMYMGELVRLILVKMAKEELLFGGKLSPELLNTGRFETKDISDIEGEKDGIR
KAREVLMRLGLDPTQEDCVATHRICQIVSTRSASLCAATLA AVLQRIKENKGEERLRSTIGVDGSVYKHH
PHFAKRLHKTVRRLVPGCDVRF LRSEDGSGKGAAMVTAVAYRLADQHRARQKTLEHLQLSHDQLLEVKRR
MKVEMERGLSKETHASAPVKMLPTYVCA TPDGTEKGFALDLGGTNFRVLLVRVRNGKGGVEMHNKIY
AIPQEVMHGTGDELFDHIVQCIADFL EYMGKGVSLPLGFTFSFPQQNSLDESILLKWTGFKASGCEG
EDVVTLLKEA IHRREEFDL DVVAVVNDTVGTMTCGFEDPHCEVGLIVGTGSNACYMEEMRNVELVEGEE
GRMCVNMWGAFGDNGLDDFRTEFDVAVDEL SLNPGKQRF EKMI SGMYLGEIVRNILIDFTKRGLLFRG
RISERLKRTRGIFETKFLSQIESDCLALLQVRAILQHLGLESTCDDSIIVKEVCTVVARAAQLCGAGMAA
VVDRIRENRGLDALKVTVGV DGTLYKLHPHFAKVMHETVKDLAPKCDVSFLQSEDGSGKGAALITAVACR
IREAGQR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.



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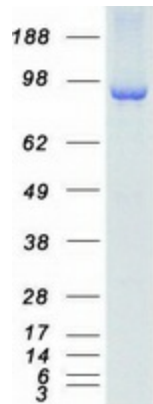
RefSeq:	NP_000180
RefSeq Size:	7109
RefSeq ORF:	2751
Synonyms:	HKII; HXK2
Locus ID:	3099
UniProt ID:	P52789
Cytogenetics:	2p12

Summary: 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. [provided by RefSeq, Apr 2009]

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 HK2 protein (Cat# [TP309482]). The protein was produced from HEK293T cells transfected with HK2 cDNA clone (Cat# [RC209482]) using MegaTran 2.0 (Cat# [TT210002]).