HK2
Recombinant Human Hexokinase-2

Catalog No.	CS128A CS128B CS128C	**Quantity:**	2 µg 10 µg 1 mg

Alternate Names: Hexokinase-2, EC 2.7.1.1, HK2, Hexokinase type II, HK II, Muscle form hexokinase, HXK2, DKFZp686M1669.

Description: Hexokinases phosphorylate glucose to produce glucose-6-phosphate, thus committing glucose to the glycolytic pathway. Hexokinase 2 is 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.

HK2 Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain fused to His tag at the N-terminal encoding the sequence of 937 amino acids and having a molecular mass of 104.1 kDa.

HXK2 is purified by proprietary chromatographic techniques.

Concentration: 1.0 mg/ml

Protein Accession No: P52789

Source: *E. coli*

Molecular Weight: 104.1 kDa

Formulation: Sterile filtered liquid in 20 mM Tris pH 8.0 + 10% Glycerol

Purity: >90% by RP-HPLC and SDS-PAGE

Biological Activity: Obtained by measuring the increase of NADPH in absorbence at 340 nm resulting from the reduction of NADP. In the coupled mode, one unit will produce 1.0 µM of NADPH per minute as glucose is phosphorylated by ATP at pH 7.4 at 37°C.

Specific Activity: 3-4 U/ml

Cell Sciences®
480 Neponset Street
Bldg 12A
Canton, MA 02021

Toll Free: 888-769-1246
Phone: 781-828-0610
Fax: 781-828-0542

E-mail: info@cellsciences.com
Website: www.cellsciences.com

Amino Acid Sequence: MGSSHHHHHH SSGLVPRGSH MIASHLLAYF FTELNHDQVQ KVDQYLYHMR LSDETLLEIS KRFRKEMEKG LGATTHPTAA VKMLPTFVRS TPDGTEHGEF LALDLGGTNF RVLWVKVTDN GLQKVEMENQ IYAIPEDIMR GSGTQLFDHI AECLANFMDK LQIKDKKLPL GFTFSFPCHQTKLDESFLVS WTKGFKSSGV EGRDVVALIR KAIQRRGDFD IDIVAVVNDT VGTMMTCGYD DHNCEIGLIV GTGSNACYME EMRHIDMVEG DEGRMCINME WGAFGDDGSL NDIRTEFDQE IDMGSLNPGK QLFEKMISGM YMGELVRLIL VKMAKEELLF GGKLSPELLN TGRFETKDISDIEGEKDGIR KAREVLMRLG LDPTQEDCVA THRICQIVST RSASLCAATL AAVLQRIKENKGEERLRSTI GVDGSVYKKH PHFAKRLHKT VRRLVPGCDV RFLRSEDGSG KGAAMVTAVAYRLADQHRAR QKTLEHLQLS HDQLLEVKRR MKVEMERGLS KETHASAPVK MLPTYVCATPDGTEKGDFLA LDLGGTNFRV LLVRVRNGKW GGVEMHNKIY AIPQEVMHGT GDELFDHIVQ CIADFLEYMG MKGVSLPLGF TFSFPCQQNS LDESILLKWT KGFKASGCEG EDVVTLLKEA IHRREEFDLD VVAVVNDTVG TMMTCGFEDP HCEVGLIVGT GSNACYMEEM RNVELVEGEE GRMCVNMEWG AFGDNGCLDD FRTEFDVAVD ELSLNPGKQR FEKMISGMYL GEIVRNILID FTKRGLLFRG RISERLKTRG IFETKFLSQI ESDCLALLQV RAILQHLGLE STCDDSIIVK EVCTVVARRA AQLCGAGMAA VVDRIRENRG LDALKVTVGV DGTLYKLHPH FAKVMHETVK DLAPKCDVSF LQSEDGSGKG AALITAVACR IREAGQR

Storage & Stability: Store at 2-4°C if entire vial will be used within 2-4 weeks. For longer periods of time, store at -20°C. **Avoid repeated freeze-thaw cycles.**

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

Cell Sciences®
480 Neponset Street
Bldg 12A
Canton, MA 02021

Toll Free: 888-769-1246
Phone: 781-828-0610
Fax: 781-828-0542

E-mail: info@cellsciences.com
Website: www.cellsciences.com