

Datasheet for ABIN7548361

**Hexokinase 2 Protein (HK2) (AA 1-917) (His tag)**[Go to Product page](#)

## Overview

Quantity:	1 mg
Target:	Hexokinase 2 (HK2)
Protein Characteristics:	AA 1-917
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Hexokinase 2 protein is labelled with His tag.

## Product Details

Purpose:	Custom-made recombinant HK2 Protein expressed in mammalian cells.
Sequence:	MIASHLLAYF FTELNHDQVQ KVDQYLYHMR LSDETLLEIS KRFRKEMEKG LGATTHPTAA VKMLPTFVRS TPDGTEHGEF LALDLGGTNF RVLWVKVTDN GLQKVEMENQ IYAIPEDIMR GSGTQLFDHI AECLANFMDK LQIKDKKLPL GFTFSFPCHQ TKLDESFLVS WTKGFKSSGV EGRDVVALIR KAIQRRGDFD IDIVAVVNDT VGTMMTCGYD DHNCEIGLIV GTGSNACYME EMRHIDMVEG DEGRMCINME WGAFGDDGSL NDIRTEFDQE IDMGSLNPGK QLFKEMISGM YMGELVRLIL VKMAKEELLF GKKLSPELLN TGRFETKDIS DIEGEKDGIR KAREVLMRLG LDPTQEDCVA THRICQIVST RSASLCAATL AAVLQRIKEN KGEERLRSTI GVDGSVYKHH PHFAKRLHKT VRRLLVPGCDV RFLRSEDGSG KGAAMVTAVA YRLADQHRAR QKTLEHLQLS HDQLLEVKRR MKVEMERGLS KETHASAPVK MLPTYVCATP DGTEKGDFLA LDLGGTNFRV LLVRVRNGKW GGVEMHNKIY AIPQEVMHGT GDELFDHIVQ CIADFLEYMG MKGVSLPLGF TFSFPCQQNS LDESILLKWT KGFKASGCEG EDVVTLLKEA IHRREEFDLD VVAVVNDTVG TMMTCGFEDP HCEVGLIVGT GSNACYMEEM RNVELVEGEE GRMCVNMEWG AFGDNGCLDD

## Product Details

---

FRTEFDVAVD ELSLNPGKQR FEKMISGMYL GEIVRNILID FTKRGLLFRG RISERLKTRG  
IFETKFLSQI ESDCLALLQV RAILQHLGLE STCDDSIIVK EVCTVVARRA AQLCGAGMAA  
VVDRIRENRG LDALKVTGVV DGTLYKLHPH FAKVMHETVK DLAPKCDVSF LQSEDGSGKG  
AALITAVACR IREAGQR **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

Specificity: If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

Characteristics: **Key Benefits:**

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity: > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade: custom-made

## Target Details

---

Target: Hexokinase 2 (HK2)

Alternative Name: HK2 ([HK2 Products](#))

Background: Hexokinase-2 (EC 2.7.1.1) (Hexokinase type II) (HK II) (Hexokinase-B) (Muscle form hexokinase),FUNCTION: Catalyzes the phosphorylation of hexose, such as D-glucose and D-fructose, to hexose 6-phosphate (D-glucose 6-phosphate and D-fructose 6-phosphate, respectively) (PubMed:23185017, PubMed:26985301, PubMed:29298880). Mediates the initial step of glycolysis by catalyzing phosphorylation of D-glucose to D-glucose 6-phosphate

## Target Details

---

(PubMed:29298880). Plays a key role in maintaining the integrity of the outer mitochondrial membrane by preventing the release of apoptogenic molecules from the intermembrane space and subsequent apoptosis (PubMed:18350175). {ECO:0000269|PubMed:18350175, ECO:0000269|PubMed:23185017, ECO:0000269|PubMed:26985301, ECO:0000269|PubMed:29298880}.

Molecular Weight: 102.4 kDa

UniProt: [P52789](#)

Pathways: [PI3K-Akt Signaling](#), [Carbohydrate Homeostasis](#), [Warburg Effect](#)

## Application Details

---

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

## Handling

---

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months