

Datasheet for ABIN7562164

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: | Mouse |
| 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: | MIASHMIACL FTELNQNVQV KVDQYLYHMR LSDETLLEIS RRFKEMEKG LGATTHTPTAA VKMLPTFVRS TPDGTEHGEF LALDLGGTNF RVLVRVTDN GLQRVEMENQ IYAIPEDIMR GSGTQLFDHI AECLANFMDK LQIKEKKLPL GFTFSFPCHQ TKLDESFLVS WTKGFKSSGV EGRDVVDLIR KAIQRRGDFD IDIVAVVNDT VGTMMTCGYD DQNCIEGLIV GTGSNACYME EMRHIDMVEG DEGRMCINME WGAFGDDGTL NDIRTEFDRE IDMGSLNPGK QLFKEMISGM YMGELVRLIL VKMAKAELLF QGKLSPELLT TGSFETKDVS DIEDDKDGIQ KAYQILVRLG LSPLQEDCVA THRICQIVST RSASLCAATL AAVLWRIKEN KGEERLRSTI GVDGSVYKHH PHFAKRLHKA VRRLVPDCDV RFLRSEDGSG KGAAMVTAVA YRLADQHRAR QKTLESCLKS HEQLLEVKRR MKVEMEQGLS KETHEAAPVK MLPTYVCATP DGTEKGDFLA LDGGTNFRV LLVRVRNGKR RGVEMHNKIY SIPQEVMHGT GEELFDHIVQ CIADFLEYMG MKGVSLPLGF TFSFPCQQNS LDQSILLKWT KGFKASGCEG EDVVTLLKEA IRRREEFDLD VVAVVNDTVG TMMTCGYEDP HCEVGLIVGT GSNACYMEEM RNVELVDGEE GRMCMVMEWG AFGDNGCLDD |

Product Details

LRTVFDVAVD ELSLNPGKQR FEKMISGMYL GEIVRNILID FTKRGLLFRG RISERLKTRG
IFETKFLSQI ESDCLALLQV RAILRHLEGLE STCDDSIIVK EVCTVVARRA AQLCGAGMAA
VVDKIRENRG LDNLKVTGV DGTLYKLPHF FAKVMHETVR DLAPKCDVSF LESEDGSGKG
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),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) (By similarity). Mediates the initial step of glycolysis by catalyzing phosphorylation of D-glucose to D-glucose 6-phosphate (By similarity). Plays a key role in maintaining the integrity of the outer mitochondrial membrane

Target Details

by preventing the release of apoptogenic molecules from the intermembrane space and subsequent apoptosis (PubMed:18350175). {ECO:0000250|UniProtKB:P27881, ECO:0000269|PubMed:18350175}.

Molecular Weight: 102.5 kDa

UniProt: [O08528](#)

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