Datasheet for ABIN3081804

HK3 Protein (AA 1-923) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	HK3
Protein Characteristics:	AA 1-923
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This HK3 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	MDSIGSSGLR QGEETLSCSE EGLPGPSDSS ELVQECLQQF KVTRAQLQQI QASLLGSMEQ ALRGQASPAP AVRMLPTYVG STPHGTEQGD FVVLELGATG ASLRVLWVTL TGIEGHRVEP RSQEFVIPQE VMLGAGQQLF DFAAHCLSEF LDAQPVNKQG LQLGFSFSFP CHQTGLDRST LISWTKGFRC SGVEGQDVVQ LLRDAIRRQG AYNIDVVAVV NDTVGTMMGC EPGVRPCEVG LVVDTGTNAC YMEEARHVAV LDEDRGRVCV SVEWGSFSDD GALGPVLTTF DHTLDHESLN PGAQRFEKMI GGLYLGELVR LVLAHLARCG VLFGGCTSPA LLSQGSILLE HVAEMEDPST GAARVHAILQ DLGLSPGASD VELVQHVCAA VCTRAAQLCA AALAAVLSCL QHSREQQTLQ VAVATGGRVC ERHPRFCSVL QGTVMLLAPE CDVSLIPSVD GGGRGVAMVT AVAARLAAHR RLLEETLAPF RLNHDQLAAV QAQMRKAMAK GLRGEASSLR MLPTFVRATP DGSERGDFLA LDLGGTNFRV LLVRVTTGVQ ITSEIYSIPE TVAQGSGQQL FDHIVDCIVD FQQKQGLSGQ SLPLGFTFSF PCRQLGLDQG ILLNWTKGFK ASDCEGQDVV SLLREAITRR QAVELNVVAI

VNDTVGTMMS CGYEDPRCEI GLIVGTGTNA CYMEELRNVA GVPGDSGRMC INMEWGAFGD DGSLAMLSTR FDASVDQASI NPGKQRFEKM ISGMYLGEIV RHILLHLTSL GVLFRGQQIQ RLQTRDIFKT KFLSEIESDS LALRQVRAIL EDLGLPLTSD DALMVLEVCQ AVSQRAAQLC GAGVAAVVEK IRENRGLEEL AVSVGVDGTL YKLHPRFSSL VAATVRELAP RCVVTFLQSE DGSGKGAALV TAVACRLAQL TRV

Sequence without tag. The proposed Strep-Tag is based on experience s 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.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Product Details

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	HK3
Alternative Name:	HK3 (HK3 Products)
Background:	Hexokinase-3 (EC 2.7.1.1) (Hexokinase type III) (HK III) (Hexokinase-C),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:8717435). Mediates the initial step of glycolysis by catalyzing phosphorylation of D-glucose to D-glucose 6-phosphate (PubMed:8717435). {ECO:0000269|PubMed:8717435}.
Molecular Weight:	99.0 kDa
UniProt:	P52790
Pathways:	Carbohydrate Homeostasis, Warburg Effect

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Application Details

Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months