

## Datasheet for ABIN3092913 HCK Protein (AA 2-526) (His tag)



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### 1 Image

#### Overview

Quantity:	1 mg
Target:	HCK
Protein Characteristics:	AA 2-526
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This HCK protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

#### Product Details

Sequence: GGRSSCEDPG CPRDEERAPR MGCMKSKFLQ VGGNTFSKTE TSASPHCPVY VPDPTSTIKP  
 GPNSHNSNTP GIREAGSEDI IVVALYDYEA IHEDLSFQK GDQMVVLEES GEWWKARSLA  
 TRKEGYIPSN YVARVDSLET EEWFFKGISR KDAERQLLAP GNMLGSFMIR DSETTKGSYS  
 LSVRDYDPRQ GDTVKH YKIR TLDNGGFYIS PRSTFSTLQE LVDHYKKGND GLCQKLSVPC  
 MSSKPQKPWE KDAWEIPRES LKLEKKLGAG QFGEVWMATY NKHTKVAVKT MKPGSMSVEA  
 FLAEANVMKT LQHDKLVLKH AVVTKEPIYI ITEFMAKGSL LDFLKSDEGS KQPLPKLIDF  
 SAQIAEGMAF IEQRNYIHRD LRAANILVSA SLVCKIADFG LARVIEDNEY TAREGAKFPI  
 KWTAP EAINF GSFTIKSDVW SFGILLMEIV TYGRIPYPGM SNPEVIRALE RGYRMPRPEN  
 CPEELYNIMM RCWKNRPEER PTFEYIQSVL DDFYTATESQ YQQQP

**Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

## Product Details

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- Characteristics:
- Made in Germany - from design to production - by highly experienced protein experts.
  - Human HCK Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
  - 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 will ensure that you receive a correctly folded 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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm.

The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

- Purification:
- Two step purification of proteins expressed in baculovirus infected SF9 insect cells:
1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
  2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity: >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility: 0.22 µm filtered

Endotoxin Level: Protein is endotoxin free.

Grade: Crystallography grade

## Target Details

Target:	HCK
Alternative Name:	HCK ( <a href="#">HCK Products</a> )
Background:	<p>Non-receptor tyrosine-protein kinase found in hematopoietic cells that transmits signals from cell surface receptors and plays an important role in the regulation of innate immune responses, including neutrophil, monocyte, macrophage and mast cell functions, phagocytosis, cell survival and proliferation, cell adhesion and migration. Acts downstream of receptors that bind the Fc region of immunoglobulins, such as FCGR1A and FCGR2A, but also CSF3R, PLAUR, the receptors for IFNG, IL2, IL6 and IL8, and integrins, such as ITGB1 and ITGB2. During the phagocytic process, mediates mobilization of secretory lysosomes, degranulation, and activation of NADPH oxidase to bring about the respiratory burst. Plays a role in the release of inflammatory molecules. Promotes reorganization of the actin cytoskeleton and actin polymerization, formation of podosomes and cell protrusions. Inhibits TP73-mediated transcription activation and TP73-mediated apoptosis. Phosphorylates CBL in response to activation of immunoglobulin gamma Fc region receptors. Phosphorylates ADAM15, BCR, ELMO1, FCGR2A, GAB1, GAB2, RAPGEF1, STAT5B, TP73, VAV1 and WAS.</p> <p>{ECO:0000269 PubMed:10092522, ECO:0000269 PubMed:10779760, ECO:0000269 PubMed:10973280, ECO:0000269 PubMed:11741929, ECO:0000269 PubMed:11896602, ECO:0000269 PubMed:12411494, ECO:0000269 PubMed:15010462, ECO:0000269 PubMed:15952790, ECO:0000269 PubMed:15998323, ECO:0000269 PubMed:17310994, ECO:0000269 PubMed:17535448, ECO:0000269 PubMed:19114024, ECO:0000269 PubMed:19903482, ECO:0000269 PubMed:20452982, ECO:0000269 PubMed:21338576, ECO:0000269 PubMed:7535819, ECO:0000269 PubMed:8132624, ECO:0000269 PubMed:9406996, ECO:0000269 PubMed:9407116}.</p>
Molecular Weight:	60.4 kDa Including tag.
UniProt:	<a href="#">P08631</a>
Pathways:	<a href="#">Activation of Innate immune Response</a> , <a href="#">Cellular Response to Molecule of Bacterial Origin</a> , <a href="#">Regulation of Actin Filament Polymerization</a> , <a href="#">CXCR4-mediated Signaling Events</a> , <a href="#">Thromboxane A2 Receptor Signaling</a>

## Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
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## Application Details

	as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

## Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value 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:	Unlimited (if stored properly)

## Images



**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process