

Datasheet for ABIN3089992

**BLK Protein (AA 2-505) (His tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 mg
Target:	BLK
Protein Characteristics:	AA 2-505
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This BLK protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

## Product Details

Sequence: GLVSSKKPDK EKPIKEKDKG QWSPLKVSAQ DKDAPPLPPL VVFNHLTPPP PDEHLDEDKH  
FVVALYDYTA MNDRLQMLK GEKLQVLKGT GDWWLARSLV TGREGYVPSN FVARVESLEM  
ERWFFRSQGR KEAERQLLAP INKAGSFLIR ESETNKGAFS LSVKDVTTQG ELIKHYKIRC  
LDEGGYYISP RITFPSLQAL VQHYSKKG DG LCQRLTLPCV RPAPQNPWAQ DEWEIPRQSL  
RLVRKLGSGQ FGEVWMGYK NNMKVAIKTL KEGTMSPEAF LGANVMKAL QHERLVRLYA  
VVTKEPIYIV TEYMARGCLL DFLKTDEGSR LSLPRLIDMS AQIAEGMAYI ERMNSIHRDL  
RAANILVSEA LCCKIADFGL ARIIDSEYTA QEGAKFPIKW TAPEAIHFGV FTIKADVWSF  
GVLLMEVVTY GRVPYPGMSN PEVIRNLERG YRMPPRDTCP PELYRGVIAE CWRSRPEERP  
TFEFLQSVLE DFYTATERQY ELQP

**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 BLK 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:	BLK
Alternative Name:	BLK ( <a href="#">BLK Products</a> )
Background:	<p>Non-receptor tyrosine kinase involved in B-lymphocyte development, differentiation and signaling. B-cell receptor (BCR) signaling requires a tight regulation of several protein tyrosine kinases and phosphatases, and associated coreceptors. Binding of antigen to the B-cell antigen receptor (BCR) triggers signaling that ultimately leads to B-cell activation. Signaling through BLK plays an important role in transmitting signals through surface immunoglobulins and supports the pro-B to pre-B transition, as well as the signaling for growth arrest and apoptosis downstream of B-cell receptor. Specifically binds and phosphorylates CD79A at 'Tyr-188' and 'Tyr-199', as well as CD79B at 'Tyr-196' and 'Tyr-207'. Phosphorylates also the immunoglobulin G receptors FCGR2A, FCGR2B and FCGR2C. With FYN and LYN, plays an essential role in pre-B-cell receptor (pre-BCR)-mediated NF-kappa-B activation. Contributes also to BTK activation by indirectly stimulating BTK intramolecular autophosphorylation. In pancreatic islets, acts as a modulator of beta-cells function through the up-regulation of PDX1 and NKX6-1 and consequent stimulation of insulin secretion in response to glucose.</p> <p>{ECO:0000269 PubMed:19667185, ECO:0000269 PubMed:8756631}.</p>
Molecular Weight:	58.5 kDa Including tag.
UniProt:	<a href="#">P51451</a>
Pathways:	<a href="#">Positive Regulation of Peptide Hormone Secretion</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 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