

## Datasheet for ABIN3096410 XPO4 Protein (AA 1-1151) (His tag)



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#### Overview

Quantity:	1 mg
Target:	XPO4
Protein Characteristics:	AA 1-1151
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This XPO4 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)

#### Product Details

Sequence:	<p>MMAAALGPPE VIAQLENAAK VLMAPPSMVN NEQRQHA EHI FLSFRKSKSP FAVCKHILET</p> <p>SKVDYVLFQA ATAIMEAVVR EWILLEK GSI ESLRTFLLTY VLQRPNLQKY VREQILLAVA</p> <p>VIVKRGSLDK SIDCKSIFHE VSQLISSGNP TVQTLACSIL TALLSEFSSS SKTSNIGLSM</p> <p>EFHGNCKRVF QEEDLRQIFM LTVEVLQEFS RRENINAQMS SVFQRYLALA NQVLSWNFLP</p> <p>PNLGRHYIAM FESSQNVLLK PTESWRETLL DSRVMELFFT VHRKIREDS MAQDSLQCLA</p> <p>QLASLHGPIF PDEGSQVDYL AHFIEGLLNT INGIEIEDSE AVGISSIISN LITVFPNRVL TAIPSELFSS</p> <p>FVNCLTHLTC SFGRSAALEE VLDKDDMVYM EAYDKLLESW LTLVQDDKHF HKGFFTQHAV</p> <p>QVFNSYIQCH LAAPDGTRNL TANGVASREE EEISELQEDD RDQFSDQLAS VGMLGRIAAE</p> <p>HCIPLLTSL EERVTRLHGQ LQRHQQLLA SPGSSTVDNK MLDDLYEDIH WLILVTGYLL</p> <p>ADDTQGETPL IPPEIMEYSI KHSSEVDINT TLQILGSPGE KASSIPGYNR TDSVIRLLSA</p> <p>ILRVSEVESR AIRADLTHLL SPQMGKDIVW FLKRWAKTYL LVDEKLYDQI SLPFSTAFGA</p> <p>DTEGSQWIIG YLLQKVISNL SVWSSEQDLA NDTVQLLVTL VERRERANLV IQCENWWNLA</p>
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KQFASRSPPL NFLSSPVQRT LMKALVLGGF AHMDTETKQQ YWTEVLQPLQ QRFLRVINQE  
NFAQMCQQEE VKQEITATLE ALCGIAEATQ IDNVAILFNF LMDFLTNCIG LMEVYKNTPE  
TVNLIIEVFV EVAHKQICYL GESKAMNLYE ACLTLLQVYS KNNLGRQRID VTAEEEQYQD  
LLLIMELLTN LLSKEFIDFS DTDEVFRGHE PGQAANRSVS AADVVLGYGN LILPLMSQDL  
LKFTPLCNQY YKLITFICEI FPEKIPQLPE DLFKSLMYSL ELGMTSMSSE VCQLCLEALT  
PLAEQCAKAQ ETDSPFLAT RHFLKLVFDM LVLQKHNTTEM TTAAGEAFYT LVCLHQAAYS  
ELVETLLSSQ QDPVIYQRLA DAFNKL TASS TPPTLDRKQK MAFLKSLEEF MANVGGLLCV K

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

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### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human XPO4 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.

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### 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

## Product Details

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: XPO4

Alternative Name: XPO4 ([XPO4 Products](#))

Background: Mediates the nuclear export of proteins (cargos) with broad substrate specificity. In the nucleus binds cooperatively to its cargo and to the GTPase Ran in its active GTP-bound form. Docking of this trimeric complex to the nuclear pore complex (NPC) is mediated through binding to nucleoporins. Upon transit of a nuclear export complex into the cytoplasm, disassembling of the complex and hydrolysis of Ran-GTP to Ran-GDP (induced by RANBP1 and RANGAP1, respectively) cause release of the cargo from the export receptor. XPO4 then return to the nuclear compartment and mediate another round of transport. The directionality of nuclear export is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus. {ECO:0000269|PubMed:10944119, ECO:0000269|PubMed:16449645}.

Molecular Weight: 131.1 kDa Including tag.

UniProt: [Q9C0E2](#)

## 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.

## Application Details

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