

Datasheet for ABIN3093082

Importin 9 Protein (IPO9) (AA 2-1041) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	Importin 9 (IPO9)
Protein Characteristics:	AA 2-1041
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Importin 9 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), Crystallization (Crys), ELISA

Product Details

Sequence:	AAAAAGAAS GLPGPVAQGL KEALVDTLTG ILSPVQEVRA AAEEQIKVLE VTEEFVGH ELTVDPQGAL AIRQLASVIL KQYVETHWCA QSEKFRPPET TERAIVIRE LLPNGLR SKVRSSVAYA VSAIAHWDWP EAWPQLFNLL MEMLVSGDLN AVHGAMRVLT EFTRE MPLVAPVILP EMYKIFTMAE VYGIRTSRA VEIFTTCAHM ICNMEELEKG AAKVLIFPV QQFTEAFVQA LQIPDGPTSD SGFKMEVLKA VTALVKNFPK HMVSSMQQIL PIVWNTL AAFYVRTEVN YTEEVDPVD SDGEVLGFEN LVFSIFEVH ALLENSKFVS TVKKALPEL YYIILYMQIT EEQIKVWTAN PQQFVEDEDD DTFSYTVRIA AQDLLAVAT DFQNESAA AAAATRLQE AEQTKNSGTE HWWKIHEACM LALGSVKAI TDSVKNRIH FDMHGFLTNV ILADLNLSVS PFLGRALWA ASRFTVAMSP ELIQFLQAT VSGLHETQPP SVRISAVRAI WGYCDQLKVS ESTHVLQPFL PSILDGLIHL AAQFSSEVLN LVMETLCIVC TVDPEFTAS ESKICPFTIA IFLKYSNDPV VASLAQDIFK ELSQIEACQG PMQMRLIPTL VSIMQAPADK IPAGLCATAI DILTTVVRNT KPPLSQLLIC QAFPAVAQCT LHTDDNATMQ NGGECLRAYV
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SVTLEQVAQW HDEQGHNGLW YVMQVVSQLL DPRTSEFTAA FVGRLVSTLI SKAGRELGEN
LDQILRAILS KMQQAETLSV MQSLIMVFAH LVHTQLEPLL EFLCSLPGPT GKPALEFVMA
EWTSRQHLYF GQYEGKVSSV ALCKLLQHGI NADDKRLQDI RVKGEEIYSM DEGIRTRSKS
AKNPERWTNI PLLVKILKLI INELSNVMEA NAARQATPAE WSQDDSNDMW EDQEEEEEEE
EDGLAGQLLS DILATSKYEE DYYEDEEDD PDALKDPLYQ IDLQAYLTDF LCQFAQQPCY
IMFSGHLNDN ERRVLQTIGI

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

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human IPO9 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.

Product Details

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:	Importin 9 (IPO9)
Alternative Name:	IPO9 (IPO9 Products)
Background:	Functions in nuclear protein import as nuclear transport receptor. Serves as receptor for nuclear localization signals (NLS) in cargo substrates. Is thought to mediate docking of the importin/substrate complex to the nuclear pore complex (NPC) through binding to nucleoporin and the complex is subsequently translocated through the pore by an energy requiring, Ran-dependent mechanism. At the nucleoplasmic side of the NPC, Ran binds to the importin, the importin/substrate complex dissociates and importin is re-exported from the nucleus to the cytoplasm where GTP hydrolysis releases Ran. The directionality of nuclear import is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus (By similarity). Mediates the nuclear import of H2B histone (By similarity), RPS7 and RPL18A. Prevents the cytoplasmic aggregation of RPS7 and RPL18A by shielding exposed basic domains. May also import H2A, H3, H4 histones (By similarity), RPL4 and RPL6. {ECO:0000250, ECO:0000269 PubMed:11823430}.
Molecular Weight:	116.8 kDa Including tag.
UniProt:	Q96P70
Pathways:	Protein targeting to Nucleus

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