

Datasheet for ABIN3093230

Importin 8 Protein (IPO8) (AA 1-1037) (Strep Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	Importin 8 (IPO8)
Protein Characteristics:	AA 1-1037
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Importin 8 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Sequence:	MDLNRIIQAL KGTIDPKLRI AAENELNQSY KIINFAPSL RIIVSDHVEF PVRQAAAIYL KNMVTQYWPD REPPPGEAIF PFNIHENDRQ QIRDNIVEGI IRSPDLVRVQ LTMCLRAIHK HDFPGHWPGV VDKIDYYLQS QSSASWLGLS LCLYQLVKTY EYKKAEREP LIAMQIFLP RIQQQIVQLL PDSSYYSVLL QKQILKIFYA LVQYALPLQL VNNQTM TTWM EIFRTIIDRT VPPETLHIDE DDRPELVWWK CKKWALHIVA RLFERYGSPG NVTKEYFEFS EFFLKTYAVG IQQVLLKILD QYRQKEYVAP RVLQQAFNYL NQGVVHSITW KQMKPHIQNI SEDVIFSVMC YKDEDEELWQ EDPY EYIRMK FDIFEDYASP TTAAQTLLYT AAKKRKEVLP KMMAFCYQIL TDPNFDPRKK DGALHVIGSL AEILLKKSFL KDQMELFLQN HVFP LLLSNL GYLRARSCWV LHAFSSLKFH NELNLRNAVE LAKKSLIEDK EMPVKVEAAL ALQSLISNQI QAKEYMKPHV RPIMQELLHI VRETENDDVT NVIQKMICEY SQEVASIAVD MTQHLAEIFG KVLQSDEYEE VEDKTVMAMG ILHTIDTILT VVEDHKEITQ QLENICLR II DLVLQKHVIE FYEEILSLAY SLTCHSIS PQ MWQLLGILYE VFQQDCFEYF TDMMPLLHNY VTIDTDTLLS NAKHLEILFT MCRKVLCGDA
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GEDAECHAAK LLEVILQCK GRGIDQCIPL FVQLVLERLT RGVKTSELRT MCLQVAIAAL
YYNPDLLLHT LERIQLPHNP GPITVQFINQ WMNDTDCFLG HHDRKMCIIG LSILLELQNR
PPAVDAVVGQ IVPSILFLFL GLKQVCATRQ LVNREDRSKA EKADMEENEE ISSDEEETNV
TAQAMQSNNG RGEDEEEEDD DWDEEVLEET ALEGFSTPLD LDNSVDEYQF FTQALITVQS
RDAAWYQLLM APLSEDQRTA LQEVYTLAEH RRTVAEAKKK IEQQGGFTFE NKGVLSAFNF
GTVPSNN

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 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.

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.

Product Details

- The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. 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:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	Importin 8 (IPO8)
Alternative Name:	IPO8 (IPO8 Products)
Background:	Importin-8 (Imp8) (Ran-binding protein 8) (RanBP8),FUNCTION: Involved in nuclear protein import, either by acting as autonomous nuclear transport receptor or as an adapter-like protein in association with the importin-beta subunit KPNB1. Acting autonomously, may serve as receptor for nuclear localization signals (NLS) and promote translocation of import substrates through the nuclear pore complex (NPC) by an energy requiring, Ran-dependent mechanism. At the nucleoplasmic side of the NPC, Ran binds to 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 (PubMed:9214382). In vitro mediates the nuclear import of the signal recognition particle protein SRP19 (PubMed:11682607). May also be involved in cytoplasm-to-nucleus shuttling of a broad spectrum of other cargos, including Argonaute-microRNAs complexes, the JUN protein, RELA/NF-kappa-B p65 subunit, the translation initiation factor EIF4E and a set of receptor-activated mothers against decapentaplegic homolog (SMAD) transcription factors that play a critical role downstream of the large family of transforming growth factor beta and bone morphogenetic protein (BMP) cytokines (Probable). {ECO:0000269 PubMed:11682607,

Target Details

ECO:0000269|PubMed:9214382, ECO:0000305|PubMed:34010604}.

Molecular Weight: 119.9 kDa

UniProt: [O15397](#)

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!

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)



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