

Datasheet for ABIN3093062

IFT140 Protein (AA 1-1462) (Strep Tag)



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Overview

Quantity:	1 mg
Target:	IFT140
Protein Characteristics:	AA 1-1462
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This IFT140 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence: MALYYDHQIE APDAAGSPSF ISWHPVHPFL AVAYISTTST GSVDIYLEQG ECVPDTHVER
PFRVASLCWH PTRLVLAVGW ETGEVTVFNK QDKEQHTMPL THTADITVLR WSPSGNCLLS
GDRLGVLLW RLDQRGRVQG TPLLKHEYGK HLTHCIFRLP PPGEDLVQLA KAAVSGDEKA
LDMFNWKKSS SGSLKMGSH EGLLFFVSLM DGTVHYVDEK GKTTQVVSAD STIQMLFYME
KREALVVVTE NLRLSLYVTP PEGKAEVMK VKLSGKTGRR ADIALIEGSL LVMAVGEEAL
RFWDIERGEN YILSPDEKFG FEKGENMNCV CYCKVKGLLA AGTDRGRVAM WRKVPDFLGS
PGAEGKDRWA LQTPTELQGN ITQIQWGSRK NLLAVNSVIS VAILSERAMS SHFHQQVAAM
QVSPSLLNVC FLSTGVAHSL RTDMHISGVF ATKDAVAVWN GRQVAIFELS GAAIRSAGTF
LCETPVLAMH EENVYTVESN RVQVRTWQGT VKQLLLFSET EGNPCFLDIC GNFLVVGTDL
AHFKSFDLSR REAKAHCSCR SLAELVPGVG GIASLRCSSS GSTISILPSK ADNSPDSKIC
FYDVEMDTVT VDFKGTGQID RRETLSFNEQ ETNKSHLFVD EGLKNYVPVN HFWDQSEPRL
FVCEAVQETP RSQPQSANGQ PQDGRAGPAA DVLILSFFIS EEHGFLLES FPRPATSHSL

LGMEVPPYYF TRKPEEADRE DEVEPGCHHI PQMVSRRLR DFGLEDCKD ATRDAMLHFS
FFVTIGDMDE AFKSIKLIK EAVWENMARM CVKTQRLDVA KVCLGNMGHA RGARALREAE
QEPELEARVA VLATQLGMLE DAEQLYRKCK RHDLLNKFYQ AAGRWQEALQ VAEHHDRVHL
RSTYHRYAGH LEASADCSRA LSYYEKSDTH RFEVPRMLSE DLPSLELYVN KMKDKTLWRW
WAQYLESQGE MDAALHYYEL ARDHFSLVRI HCFQGNVQKA AQIANETGNL AASYHLARQY
ESQEEVGQAV HFYTRAQAFK NAIRLCKENG LDDQLMNLAL LSSPEDMIEA ARYYEEKGVQ
MDRAVMLYHK AGHFSKALEL AFATQQFVAL QLIAEDLDET SDPALLARCS DFFIEHSQYE
RAVELLLAAR KYQEALQLCL GQNMSITEEM AEKMTVAKDS SDLPEESRRE LLEQIADCCM
RQGSYHLATK KYTQAGNKLK AMRALLKSGD TEKITFFASV SRQKEIYIMA ANYLQSLDWR
KEPEIMKNII GFYTKGRALD LLAGFYDACA QVEIDEYQNY DKAHGALTEA YKCLAKAKAK
SPLDQETRLA QLQSRMALVK RFIQARRTYT EDPKESIKQC ELLLEPDLD STIRIGDVYG
FLVEHYVRKE EYQTAYRFLE EMRRLPLAN MSYYVSPQAV DAVHRGLGLP LPRTVPEQVR
HNSMEDAREL DEEVVEEADD DP

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

Product Details

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.
- 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:

IFT140

Alternative Name:

IFT140 ([IFT140 Products](#))

Background:

Intraflagellar transport protein 140 homolog (WD and tetratricopeptide repeats protein 2),FUNCTION: Component of the IFT complex A (IFT-A), a complex required for retrograde ciliary transport and entry into cilia of G protein-coupled receptors (GPCRs) (PubMed:20889716, PubMed:22503633). Plays a pivotal role in proper development and function of ciliated cells through its role in ciliogenesis and/or cilium maintenance (PubMed:22503633). Required for the development and maintenance of the outer segments of rod and cone photoreceptor cells. Plays a role in maintenance and the delivery of opsin to the outer segment of photoreceptor cells (By similarity). {ECO:0000250|UniProtKB:E9PY46, ECO:0000269|PubMed:20889716,

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ECO:0000269|PubMed:22503633, ECO:0000269|PubMed:28724397}.

Molecular Weight: 165.2 kDa

UniProt: [Q96RY7](#)

Pathways: [Hedgehog Signaling](#)

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