

Datasheet for ABIN3093122

IFT122 Protein (AA 1-1241) (Strep Tag)



[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	IFT122
Protein Characteristics:	AA 1-1241
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This IFT122 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MRAVLTWDRK AEHCINDIAF KPDGTQLILA AGSRLLVYDT SDGTLQLPLK GHKDTVYCVA YAKDGKRFAS GSADKSVIIW TSKLEGILKY THNDAIQCVS YNPITHQLAS CSSSDFGLWS PEQKSVSKHK SSSKIICCSW TNDGQYLALG MFNGIISIRN KNGEEKVKIE RPPGSLSPIW SICWNPSSRW ESFWMNRENE DAEDVIVNRY IQEIPSTLKS AVYSSQGSEA EEEEEPEEEDD SPRDDNLEER NDILAVADWG QKVSFYQLSG KQIGKDRALN FDPCCISYFT KGEYILLGGS DKQVSLFTKD GVRLGTVGEQ NSWWVTCQAK PDSNYVVVGC QDGTISFYQL IFSTVHGLYK DRYAYRDSMT DVIVQHLITE QKVRIKCKEL VKKIAIYRNR LAIQLPEKIL IYELYSDDL DMHYRVKEKI IKKFECNLLV VCANHIILCQ EKRLQCLSFS GVKEREWQME SLIRYIKVIG GPPGREGLLV GLKNGQILKI FVDNLFAIVL LKQATAVRCL DMSASRKKLA VVDENDTCLV YDIDTKELLF QEPNANSVAW NTQCEDMLCF SGGGYLNIKA STFPVHRQKL QGFVVGYNYS KIFCLHVFSI SAVEVPQSAP MYQYLDRKLF KEAYQIACLG VTDTDWRELA MEALEGLDFE TAKKAFIRVQ DLRYLELISS IEERKKRGET NNDLFLADV SYQKGFHEAA KLYKRSGHEN
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LALEMYTDLC MFEYAKDFLG SGDPKETKML ITKQADWARN IKEPKAAVEM YISAGEHVKA  
IEICGDHGWV DMLIDIARKL DKAEREPLLL CATYLLKLDL PGYAAETYLK MGDLSLVQL  
HVETQRWDEA FALGEKHPEF KDDIYMPYAQ WLAENDRFEE AQKAFHKAGR QREAVQVLEQ  
LTNNAVAESR FNDAAAYYWM LSMQCLDIAQ DPAQKDTMLG KFYHFQRLAE LYHGYHAIHR  
HTEDPFSVHR PETLFNISRF LLHSLPKDTP SGISKVKILF TLAKQSKALG AYRLARHAYD  
KLRGLYIPAR FQKSIELGTL TIRAKPFHDS EELVPLCYRC STNNPLNNL GNVGINCRQP  
FIFSASSYDV LHLVEFYLEE GITDEEAISL IDLEVLRPKR DDRQLEIANN SSQILRLVET KDSIGDEDPF  
TAKLSFEQGG SEFVPVVVSR LVLRSMSRRD VLIKRWPPPL RWQYFRSLLP DASITMCPSC  
FQMFHSEDYE LLVLQHGCCP YCRRCKDDPG P

**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.**

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### 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!

## Product Details

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:	IFT122
Alternative Name:	IFT122 ( <a href="#">IFT122 Products</a> )
Background:	Intraflagellar transport protein 122 homolog (WD repeat-containing protein 10) (WD repeat-containing protein 140),FUNCTION: As a 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), it is required in ciliogenesis and ciliary protein trafficking (PubMed:27932497, PubMed:29220510). Involved in cilia formation during neuronal patterning. Acts as a negative regulator of Shh signaling. Required to recruit TULP3 to primary cilia (By similarity). {ECO:0000250 UniProtKB:Q6NWW3, ECO:0000269 PubMed:27932497, ECO:0000269 PubMed:29220510}.
Molecular Weight:	141.8 kDa
UniProt:	<a href="#">Q9HBG6</a>
Pathways:	<a href="#">Tube Formation</a> , <a href="#">Embryonic Body Morphogenesis</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.
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Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p>
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Restrictions:	For Research Use only
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## 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