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Datasheet for ABIN3095005
RFX3 Protein (AA 1-749) (Strep Tag)

Overview

Quantity:	1 mg
Target:	RFX3
Protein Characteristics:	AA 1-749
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RFX3 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	<p>MQTSETGSDT GSTVTLQTSV ASQAAVPTQV VQQVPVQQQV QQVQTVQQVQ HVYPAQVQYV EGSDTVYTNG AIRTTTYPYT ETQMYSQNTG GNYFDTQGSS AQVTTVVSSH SMVGTGGIQM GVTGGQLISS SGGTYLIGNS MENSGHSVTH TTRASPATIE MAIETLQKSD GLSTHRSSLL NSHLQWLLDN YETAEGVSLP RSTLYNHLYR HCQEHKLDPV NAASFGKLIR SIFMGLRTRR LGTRGNSKYH YYGIRVKPDS PLNRLQEDMQ YMAMRQQPMQ QKQRYKPMQK VDGVDAGFTG SGQQTGTSVE QTVIAQSQHH QQFLDASRAL PEFGEVEISS LPDGTTFEDI KSLQSLYREH CEAILDVVN LQFSLIEKLW QTFWRYSPST PTDGTTITES SNLSEIESRL PKAKLITLCK HESILKWMCN CDHGMQALV EILIPDVL RP IPSALTQAIR NFAKSLEGWL SNAMNNIPQR MIQTKVAAVS AFAQTLRRYT SLNHLAQAAR AVLQNTSQIN QMLSDLNRVD FANVQEQASW VCQCDDNMVQ RLETDFKMTL QQQTLEQWA AWLDNVM MQA LKPYEGRPSF PKAARQFLK WSFYSSM VIR DLTLRSAASF GSFHLIRLLY DEYMFYLV EHV RVAQATGETP IAVMGEFGDL NAVSPGNL DK DEGSEVESEM DEELDD SSEP QAKREKTELS QAFPVGCMQP VLETGVQPSL</p>
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LNPIHSEHIV TSTQTIRQCS ATGNTYTAV

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.
- 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

Product Details

(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)

Target Details

Target: RFX3

Alternative Name: RFX3 ([RFX3 Products](#))

Background: Transcription factor RFX3 (Regulatory factor X 3),FUNCTION: Transcription factor required for ciliogenesis and islet cell differentiation during endocrine pancreas development. Essential for the differentiation of nodal monocilia and left-right asymmetry specification during embryogenesis. Required for the biogenesis of motile cilia by governing growth and beating efficiency of motile cells. Also required for ciliated ependymal cell differentiation. Regulates the expression of genes involved in ciliary assembly (DYNC2LI1, FOXJ1 and BBS4) and genes involved in ciliary motility (DNAH11, DNAH9 and DNAH5) (By similarity). Together with RFX6, participates in the differentiation of 4 of the 5 islet cell types during endocrine pancreas development, with the exception of pancreatic PP (polypeptide-producing) cells. Regulates transcription by forming a heterodimer with another RFX protein and binding to the X-box in the promoter of target genes (PubMed:20148032). Represses transcription of MAP1A in non-neuronal cells but not in neuronal cells (PubMed:12411430). {ECO:0000250|UniProtKB:P48381, ECO:0000269|PubMed:12411430, ECO:0000269|PubMed:20148032}.

Molecular Weight: 83.5 kDa

UniProt: [P48380](#)

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

Application Details

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)