Datasheet for ABIN3134196

RFX3 Protein (AA 1-749) (His tag)

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1 Image

Overview

Quantity:	1 mg
Target:	RFX3
Protein Characteristics:	AA 1-749
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RFX3 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MQTSETGSDT GSTVTLQTSV ASQAAVPTQV VQQVPVQQQV QQVQTVQQVQ HVYPAQVQYV EGSDTVYTNG AIRTTTYPYT ETQMYSQNTG GNYFDTQGSS AQVTTVVSSH SMVGTGGIQM GVTGGQLISS SGGTYLIGNS MENSGHSVTH TTRASPATIE MAIETLQKSD GLSTHRSSLL NSHLQWLLDN YETAEGVSLP RSTLYNHYLR HCQEHKLDPV NAASFGKLIR SIFMGLRTRR LGTRGNSKYH YYGIRVKPDS PLNRLQEDMQ YMAMRQQPMQ QKQRYKPMQK VDGVADGFTG SGQQTGTSVE QTVIAQSQHH QQFLDASRAL PEFGEVEISS LPDGTTFEDI KSLQSLYREH CEAILDVVVN LQFSLIEKLW QTFWRYSPST PADGTTITES SNLSEIESRL PKAKLITLCK HESILKWMCN CDHGMYQALV EILIPDVLRP IPSALTQAIR NFAKSLEGWL SNAMNNIPQR MIQTKVAAVS AFAQTLRRYT SLNHLAQAAR AVLQNTSQIN QMLSDLNRVD FANVQEQASW VCQCDDNMVQ RLETDFKMTL QQQSTLEQWA AWLDNVMMQA LKPYEGRPSF PKAARQFLLK WSFYSSMVIR DLTLRSAASF GSFHLIRLLY DEYMFYLVEH RVAQVTGETP IAVMGEFGDL NAVSPGNLDK DEGSEVESET DEDLDDSSEP RAKREKTELS QAFPVGCMQP VLESAVQPSL

	LNPLHSEHIV TSTQTIRQCS ATGNTYTAV **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. • Mouse Rfx3 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 receival 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.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.

Product Details

Grade:	Crystallography grade

Target Details

Target:	RFX3
Alternative Name:	Rfx3 (RFX3 Products)
Background:	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 (PubMed:15121860, PubMed:19671664). Also required for ciliated ependymal cell differentiation (PubMed:16930429). 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 (PubMed:17229940). Regulates transcription by forming a heterodimer with another RFX protein and binding to the X-box in the promoter of target genes (By similarity). Regulates the expression of genes involved in ciliary assembly (DYNC2LI1, FOXJ1 and BBS4) and genes involved in ciliary motility (DNAH11, DNAH9 and DNAH5). Represses transcription of MAP1A in non-neuronal cells but not in neuronal cells. {ECO:0000250|UniProtKB:P48381, ECO:0000269|PubMed:15121860, ECO:0000269|PubMed:16930429, ECO:0000269|PubMed:17229940, ECO:0000269|PubMed:19671664}.
Molecular Weight:	84.5 kDa Including tag.
UniProt:	P48381

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 gurantee though.
Comment:	Protein has not been tested for activity yet. 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.
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