Datasheet for ABIN3094356

OFD1 Protein (AA 1-1012) (Strep Tag)

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1 Image

Overview

Quantity:	1 mg
Target:	OFD1
Protein Characteristics:	AA 1-1012
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This OFD1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MMAQSNMFTV ADVLSQDELR KKLYQTFKDR GILDTLKTQL RNQLIHELMH PVLSGELQPR SISVEGSSLL IGASNSLVAD HLQRCGYEYS LSVFFPESGL AKEKVFTMQD LLQLIKINPT SSLYKSLVSG SDKENQKGFL MHFLKELAEY HQAKESCNME TQTSSTFNRD SLAEKLQLID DQFADAYPQR IKFESLEIKL NEYKREIEEQ LRAEMCQKLK FFKDTEIAKI KMEAKKKYEK ELTMFQNDFE KACQAKSEAL VLREKSTLER IHKHQEIETK EIYAQRQLLL KDMDLLRGRE AELKQRVEAF ELNQKLQEEK HKSITEALRR QEQNIKSFEE TYDRKLKNEL LKYQLELKDD YIIRTNRLIE DERKNKEKAV HLQEELIAIN SKKEELNQSV NRVKELELEL ESVKAQSLAI TKQNHMLNEK VKEMSDYSLL KEEKLELLAQ NKLLKQQLEE SRNENLRLLN RLAQPAPELA VFQKELRKAE KAIVVEHEEF ESCRQALHKQ LQDEIEHSAQ LKAQILGYKA SVKSLTTQVA DLKLQLKQTQ TALENEVYCN PKQSVIDRSV NGLINGNVVP CNGEISGDFL NNPFKQENVL ARMVASRITN YPTAWVEGSS PDSDLEFVAN TKARVKELQQ EAERLEKAFR SYHRRVIKNS AKSPLAAKSP PSLHLLEAFK NITSSSPERH IFGEDRVVSE QPQVGTLEER NDVVEALTGS

AASRLRGGTS SRRLSSTPLP KAKRSLESEM YLEGLGRSHI ASPSPCPDRM PLPSPTESRH SLSIPPVSSP PEQKVGLYRR QTELQDKSEF SDVDKLAFKD NEEFESSFES AGNMPRQLEM GGLSPAGDMS HVDAAAAAVP LSYQHPSVDQ KQIEEQKEEE KIREQQVKER RQREERRQSN LQEVLERERR ELEKLYQERK MIEESLKIKI KKELEMENEL EMSNQEIKDK SAHSENPLEK YMKIIQQEQD QESADKSSKK MVQEGSLVDT LQSSDKVESL TGFSHEELDD SW

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

Product Details

	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:	OFD1
Alternative Name:	OFD1 (OFD1 Products)
Background:	Centriole and centriolar satellite protein OFD1 (Oral-facial-digital syndrome 1 protein) (Protein 71-7A),FUNCTION: Component of the centrioles controlling mother and daughter centrioles length. Recruits to the centriole IFT88 and centriole distal appendage-specific proteins including CEP164 (By similarity). Involved in the biogenesis of the cilium, a centriole-associated function. The cilium is a cell surface projection found in many vertebrate cells required to transduce signals important for development and tissue homeostasis (PubMed:33934390). Plays an important role in development by regulating Wnt signaling and the specification of the left-right axis. Only OFD1 localized at the centriolar satellites is removed by autophagy, which is an important step in the ciliogenesis regulation (By similarity). {ECO:0000250|UniProtKB:Q80Z25, ECO:0000269|PubMed:33934390}.
Molecular Weight:	116.7 kDa
UniProt:	O75665
Pathways:	M Phase

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

