

Datasheet for ABIN3130885

## ODF2 Protein (AA 1-830) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	ODF2
Protein Characteristics:	AA 1-830
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ODF2 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

### Product Details

Brand:	AliCE®
Sequence:	<p>MSASSSGGSP RFPSCGKNGV TSLTQKKVLR TPCGAPSVTV TKSHKRGMKG DTVNVRRSVR</p> <p>VKTKVPWMPP GKSSARHVC KVENPPHCLE ITPPSSEKLV SVMRLSDLST EDDDSGHCKM</p> <p>NRYDKKIDSL MNAVGCLKSE VKMQKGERQM AKRFLEERKE ELEEVARELA ETEHENTVLR</p> <p>HNIERIKEEK DFTMLQKKHL QQEKECLMSK LVEAEMDGAA AAKQVMALKD TIGKLKTEKQ</p> <p>MTCTDINTLT RQKELLQKL STEETNRTL RDLLREQHCK EDSERLMEQQ GTLLKRLAEA</p> <p>DSEKARLLLL LQDKDKEVEE LLQEIQCEKA QAKTASELSK SMESMRGHLQ AQLRCKEAEN</p> <p>SRLCMQIKNL ERSQNQHKA EVAIMEQLKE LKQKGDRDKE TLKKAIRAQK ERAEKSEEYA</p> <p>EQLHVQLADK DLYVAEALST LESWRSRYNQ VKDKGDLEL EIIVLNDRTV DLVNQQQSLE</p> <p>EKMREDRDSL VERLHRQTAE YSAFKLENER LKASFAPMED KLNQAHLEVQ QLKASVKNYE</p> <p>GMIDNYKSQV MKTRLEADEV AAQLERCDKE NKMLKDEMKN EIEAARRQFQ SQLADLQQLP</p> <p>DILKITEAKL AECQDQLQGY ERKNIDLTAI ISDLRSRIEH QGDKLEMARE KHQASQKENK</p>

QLSQKVDELE RKLEATSAQN VEFLQVIKR EEAIHQQLR LEEKTREC GS LARQLESAIE  
DARRQVEQTK EQALSKERAA QSKILDLETQ LSRTKTEL GQ LRRTRDDADR RYQSRLQDLK  
DRLEQSESTN RSMQNYVQFL KASYANVFGD APYTSSYLTS SPIRSRSPPA

**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 in one-step affinity chromatography
- 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 try to ensure that you receive soluble 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 against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

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### Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression

## Product Details

System (ALiCE®).

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

## Target Details

Target: ODF2

Alternative Name: Odf2 ([ODF2 Products](#))

Background: Outer dense fiber protein 2 (84 kDa outer dense fiber protein) (Cenexin) (Outer dense fiber of sperm tails protein 2),FUNCTION: Seems to be a major component of sperm tail outer dense fibers (ODF). ODFs are filamentous structures located on the outside of the axoneme in the midpiece and principal piece of the mammalian sperm tail and may help to maintain the passive elastic structures and elastic recoil of the sperm tail. May have a modulating influence on sperm motility. Functions as a general scaffold protein that is specifically localized at the distal/subdistal appendages of mother centrioles. Component of the centrosome matrix required for the localization of PLK1 and NIN to the centrosomes. Required for the formation and/or maintenance of normal CETN1 assembly (By similarity).  
{ECO:0000250|UniProtKB:Q5BJF6, ECO:0000269|PubMed:15852003}.

Molecular Weight: 95.5 kDa

UniProt: [A3KGV1](#)

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.

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Application Details

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Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months