

Datasheet for ABIN3130096 SMAD9 Protein (AA 1-430) (Strep Tag)



Overview

Quantity:	250 μg
Target:	SMAD9
Protein Characteristics:	AA 1-430
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMAD9 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details	
Brand:	AliCE®
Sequence:	MHPSTPISSL FSFTSPAVKR LLGWKQGDEE EKWAEKAVDS LVKKLKKKKG AMDELERALS
	CPGQPSKCVT IPRSLDGRLQ VSHRKGLPHV IYCRVWRWPD LQSHHELKPL ECCEFPFGSK
	QKEVCINPYH YRRVETPVLP PVLVPRHSEY NPQLSLLAKF RSASLHSEPL MPHNATYPDS
	FQQSLCPAPP SSPGHVFPQS PCPTSYPHSP GSPSESDSPY QHSDFRPVCY EEPQHWCSVA
	YYELNNRVGE TFQASSRSVL IDGFTDPSNN RNRFCLGLLS NVNRNSTIEN TRRHIGKGVH
	LYYVGGEVYA ECVSDSSIFV QSRNCNYQHG FHPATVCKIP SGCSLKVFNN QLFAQLLAQS
	VHHGFEVVYE LTKMCTIRMS FVKGWGAEYH RQDVTSTPCW IEIHLHGPLQ WLDKVLTQMG
	SPHNPISSVS
	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 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 posttranslational 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.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	SMAD9
Alternative Name:	Smad9 (SMAD9 Products)
Background:	Mothers against decapentaplegic homolog 9 (MAD homolog 9) (Mothers against DPP homolog 9) (SMAD family member 9) (SMAD 9) (Smad9) (Smad8),FUNCTION: Transcriptional modulated activated by BMP (bone morphogenetic proteins) type 1 receptor kinase. SMAD9 is a receptor-regulated SMAD (R-SMAD). Has been shown to be activated by activin type I receptor-like kinases (ALK-2, ALK-3, ALK-6) which stimulate heteromerization between SMAD9 and SMAD4. May play a role in osteoblast differentiation and maturation.
Molecular Weight:	48.6 kDa
UniProt:	Q9JIW5
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. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.
Handling Advice:	Avoid repeated freeze-thaw cycles.

Handling

Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months