Datasheet for ABIN3083501

MEOX2 Protein (AA 1-304) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	MEOX2
Protein Characteristics:	AA 1-304
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MEOX2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MEHPLFGCLR SPHATAQGLH PFSQSSLALH GRSDHMSYPE LSTSSSSCII AGYPNEEGMF ASQHHRGHHH HHHHHHHHHH QQQQHQALQT NWHLPQMSSP PSAARHSLCL QPDSGGPPEL GSSPPVLCSN SSSLGSSTPT GAACAPGDYG RQALSPAEAE KRSGGKRKSD SSDSQEGNYK SEVNSKPRKE RTAFTKEQIR ELEAEFAHHN YLTRLRRYEI AVNLDLTERQ VKVWFQNRRM KWKRVKGGQQ GAAAREKELV NVKKGTLLPS ELSGIGAATL QQTGDSIANE DSHDSDHSSE HAHL **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.

Product Details

- 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.

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:	MEOX2
Alternative Name:	MEOX2 (MEOX2 Products)

Target Details

Background:	Homeobox protein MOX-2 (Growth arrest-specific homeobox) (Mesenchyme homeobox 2),FUNCTION: Mesodermal transcription factor that plays a key role in somitogenesis and somitogenesis and limb muscle differentiation (By similarity). Required during limb development for normal appendicular muscle formation and for the normal regulation of myogenic genes (By similarity). May have a regulatory role when quiescent vascular smooth muscle cells reenter the cell cycle (By similarity). Also acts as a negative regulator of angiogenesis (PubMed:17074759, PubMed:20516212, PubMed:22206000). Activates expression of CDKN1A and CDKN2A in endothelial cells, acting as a regulator of vascular cell proliferation (PubMed:17074759, PubMed:22206000). While it activates CDKN1A in a DNA-dependent manner, it activates CDKN2A in a DNA-independent manner (PubMed:22206000). Together with TCF15, regulates transcription in heart endothelial cells to regulate fatty acid transport across heart endothelial cells (By similarity). {ECO:0000250|UniProtKB:P32443, ECO:0000250|UniProtKB:P39020, ECO:0000269|PubMed:17074759, ECO:0000269|PubMed:20516212, ECO:0000269|PubMed:22206000}.
Molecular Weight:	33.6 kDa
UniProt:	P50222

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