Datasheet for ABIN3135303

KLF4 Protein (AA 1-483) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	KLF4
Protein Characteristics:	AA 1-483
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KLF4 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Brand:	AliCE®
Sequence:	MRQPPGESDM AVSDALLPSF STFASGPAGR EKTLRPAGAP TNRWREELSH MKRLPPLPGR PYDLAATVAT DLESGGAGAA CSSNNPALLA RRETEEFNDL LDLDFILSNS LTHQESVAAT VTTSASASSS SSPASSGPAS APSTCSFSYP IRAGGDPGVA ASNTGGGLLY SRESAPPPTA PFNLADINDV SPSGGFVAEL LRPELDPVYI PPQQPQPPGG GLMGKFVLKA SLTTPGSEYS SPSVISVSKG SPDGSHPVVV APYSGGPPRM CPKIKQEAVP SCTVSRSLEA HLSAGPQLSN GHRPNTHDFP LGRQLPTRTT PTLSPEELLN SRDCHPGLPL PPGFHPHPGP NYPPFLPDQM QSQVPSLHYQ ELMPPGSCLP EEPKPKRGRR SWPRKRTATH TCDYAGCGKT YTKSSHLKAH LRTHTGEKPY HCDWDGCGWK FARSDELTRH YRKHTGHRPF QCQKCDRAFS RSDHLALHMK RHF **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 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:	KLF4
Alternative Name:	Klf4 (KLF4 Products)
Background:	Krueppel-like factor 4 (Epithelial zinc finger protein EZF) (Gut-enriched krueppel-like factor),FUNCTION: Transcription factor, can act both as activator and as repressor. Binds the 5'-CACCC-3' core sequence (PubMed:10431239, PubMed:10556311, PubMed:15358627, PubMed:16954384, PubMed:17060454, PubMed:19816951, PubMed:20071344, PubMed:29593216). Binds to the promoter region of its own gene and can activate its own transcription (PubMed:10431239, PubMed:10556311, PubMed:15358627, PubMed:16954384, PubMed:17060454, PubMed:19816951, PubMed:20071344, PubMed:29593216). Regulates the expression of key transcription factors during embryonic development (PubMed:10431239, PubMed:10556311, PubMed:15358627, PubMed:16954384, PubMed:17060454, PubMed:19816951, PubMed:20071344, PubMed:29593216). Plays an important role in maintaining embryonic stem cells, and in preventing their differentiation (PubMed:10431239, PubMed:10556311, PubMed:15358627, PubMed:16954384, PubMed:17060454, PubMed:19816951, PubMed:20071344, PubMed:29593216). Required for establishing the barrier function of the skin and for postnatal maturation and maintenance of the ocular surface. Involved in the differentiation of epithelial cells and may also function in skeletal and kidney development. Contributes to the down-regulation of p53/TP53 transcription (By similarity). {ECO:0000250, ECO:0000269|PubMed:10431239, ECO:0000269|PubMed:10556311, ECO:0000269|PubMed:15358627, ECO:0000269|PubMed:16954384, ECO:0000269|PubMed:17060454, ECO:0000269|PubMed:19816951, ECO:0000269|PubMed:20071344, ECO:0000269|PubMed:29593216}.
Molecular Weight:	51.9 kDa
UniProt:	Q60793
Pathways:	Peptide Hormone Metabolism, Stem Cell Maintenance

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

Application Details

	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