

Datasheet for ABIN3135419

E2F1 Protein (AA 1-430) (Strep Tag)



Overview

Quantity:	250 μg
Target:	E2F1
Protein Characteristics:	AA 1-430
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This E2F1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details	
Brand:	AliCE®
Sequence:	MAVAPAGGQH APALEALLGA GALRLLDSSQ IVIISTAPDV GAPQLPAAPP TGPRDSDVLL
	FATPQAPRPA PSAPRPALGR PPVKRRLDLE TDHQYLAGSS GPFRGRGRHP GKGVKSPGEK
	SRYETSLNLT TKRFLELLSR SADGVVDLNW AAEVLKVQKR RIYDITNVLE GIQLIAKKSK
	NHIQWLGSHT MVGIGKRLEG LTQDLQQLQE SEQQLDHLMH ICTTQLQLLS EDSDTQRLAY
	VTCQDLRSIA DPAEQMVIVI KAPPETQLQA VDSSETFQIS LKSKQGPIDV FLCPEESADG
	ISPGKTSCQE TSSGEDRTAD SGPAGPPPSP PSTSPALDPS QSLLGLEQEA VLPRMGHLRV
	PMEEDQLSPL VAADSLLEHV KEDFSGLLPG EFISLSPPHE ALDYHFGLEE GEGIRDLFDC
	DFGDLTPLDF
	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:	E2F1
Alternative Name:	E2f1 (E2F1 Products)
Background:	Transcription factor E2F1 (E2F-1),FUNCTION: Transcription activator that binds DNA
	cooperatively with DP proteins through the E2 recognition site, 5'-TTTC[CG]CGC-3' found in the
	promoter region of a number of genes whose products are involved in cell cycle regulation or in
	DNA replication (PubMed:11672531, PubMed:20176812, PubMed:9674698). The DRTF1/E2F
	complex functions in the control of cell-cycle progression from G1 to S phase (By similarity).
	E2F1 binds preferentially RB1 in a cell-cycle dependent manner (By similarity). It can mediate
	both cell proliferation and TP53/p53-dependent apoptosis (PubMed:9674698). Blocks
	adipocyte differentiation by binding to specific promoters repressing CEBPA binding to its
	target gene promoters (PubMed:11672531, PubMed:20176812). Directly activates transcription
	of PEG10 (By similarity). Positively regulates transcription of RRP1B (By similarity).
	{ECO:0000250 UniProtKB:Q01094, ECO:0000269 PubMed:11672531,
	ECO:0000269 PubMed:20176812, ECO:0000269 PubMed:9674698}.
Molecular Weight:	46.3 kDa
UniProt:	Q61501
Pathways:	p53 Signaling, Cell Division Cycle, Mitotic G1-G1/S Phases, DNA Replication, M Phase,
	Autophagy
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!

Application Details

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