Datasheet for ABIN3092218

E2F7 Protein (AA 1-911) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	E2F7
Protein Characteristics:	AA 1-911
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This E2F7 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MEVNCLTLKD LISPRQPRLD FAVEDGENAQ KENIFVDRSR MAPKTPIKNE PIDLSKQKKF TPERNPITPV KFVDRQQAEP WTPTANLKML ISAASPDIRD REKKKGLFRP IENKDDAFTD SLQLDVVGDS AVDEFEKQRP SRKQKSLGLL CQKFLARYPS YPLSTEKTTI SLDEVAVSLG VERRRIYDIV NVLESLHLVS RVAKNQYGWH GRHSLPKTLR NLQRLGEEQK YEEQMAYLQQ KELDLIDYKF GERKKDGDPD SQEQQLLDFS EPDCPSSSAN SRKDKSLRIM SQKFVMLFLV SKTKIVTLDV AAKILIEESQ DAPDHSKFKT KVRRLYDIAN VLTSLALIKK VHVTEERGRK PAFKWIGPVD FSSSDEELVD VSASVLPELK RETYGQIQVC AKQKLARHGS FNTVQASERI QRKVNSEPSS PYREEQGSGG YSLEIGSLAA VYRQKIEDNS QGKAFASKRV VPPSSSLDPV APFPVLSVDP EYCVNPLAHP VFSVAQTDLQ AFSMQNGLNG QVDVSLASAA SAVESLKPAL LAGQPLVYVP SASLFMLYGS LQEGPASGSG SERDDRSSEA PATVELSSAP SAQKRLCEER KPQEEDEPAT KRQSREYEDG PLSLVMPKKP SDSTDLASPK TMGNRASIPL KDIHVNGQLP

AAEEISGKAT ANSLVSSEWG NPSRNTDVEK PSKENESTKE PSLLQYLCVQ SPAGLNGFNV LLSGSQTPPT VGPSSGQLPS FSVPCMVLPS PPLGPFPVLY SPAMPGPVSS TLGALPNTGP VNFSLPGLGS IAQLLVGPTA VVNPKSSTLP SADPQLQSQP SLNLSPVMSR SHSVVQQPES PVYVGHPVSV VKLHQSPVPV TPKSIQRTHR ETFFKTPGSL GDPVLKRRER NQSRNTSSAQ RRLEIPSGGA D

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.

Product Details

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:	E2F7
Alternative Name:	E2F7 (E2F7 Products)
Background:	Transcription factor E2F7 (E2F-7),FUNCTION: Atypical E2F transcription factor that participates in various processes such as angiogenesis, polyploidization of specialized cells and DNA damage response. Mainly acts as a transcription repressor that binds DNA independently of DP proteins and specifically recognizes the E2 recognition site 5'-TTTC[CG]CGC-3'. Directly represses transcription of classical E2F transcription factors such as E2F1. Acts as a regulator of S-phase by recognizing and binding the E2-related site 5'-TTCCCGCC-3' and mediating repression of G1/S-regulated genes. Plays a key role in polyploidization of cells in placenta and liver by regulating the endocycle, probably by repressing genes promoting cytokinesis and antagonizing action of classical E2F proteins (E2F1, E2F2 and/or E2F3). Required for placental development by promoting polyploidization of trophoblast giant cells. Also involved in DNA damage response: up-regulated by p53/TP53 following genotoxic stress and acts as a downstream effector of p53/TP53-dependent repression by mediating repression of indirect p53/TP53 target genes involved in DNA replication. Acts as a promoter of sprouting angiogenesis, possibly by acting as a transcription activator: associates with HIF1A, recognizes and binds the VEGFA promoter, which is different from canonical E2 recognition site, and activates expression of the VEGFA gene. Acts as a negative regulator of keratinocyte differentiation. {ECO:0000269|PubMed:14633988, ECO:0000269|PubMed:15133492, ECO:0000269|PubMed:18202719, ECO:0000269|PubMed:19223542, ECO:0000269|PubMed:21248772, ECO:0000269|PubMed:22802528, ECO:0000269|PubMed:22802529, ECO:0000269|PubMed:22903062}.
Molecular Weight:	99.9 kDa
UniProt:	Q96AV8

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