

Datasheet for ABIN3092474
EPC1 Protein (AA 1-836) (Strep Tag)[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	EPC1
Protein Characteristics:	AA 1-836
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This EPC1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MSKLSFRARA LDASKPLPVF RCEDLPDLHE YASINRAVPQ MPTGMEKEEE SEHHLQRAIS AQQVYGEKRD NMVIPVPEAE SNIAYYESIY PGEFKMPKQL IHIQPFSLDA EQPDYDLSE DEVFVNKLKK KMDICPLQFE EMIDRLEKGS GQQPVSLQEA KLLLKEDDEL IREVYEWIK KRKNCRGPSL IPSVKQEKRD GSSTNDPYVA FRRRTEKMQT RKNRKNDEAS YEKMLKLRRD LSRAVTILEM IKRREKSKRE LLHLEIME KRYNLGDYNG EIMSEVMAQR QPMKPTYAIP IIPITNSSQF KHQEAMDVKE FKVNKQDKAD LIRPKRKYK KPKVLPSSAA ATPQQTSPAA LPVFNAKDLN QYDFPSSDEE PLSQVLGSS EAEEDNDPDG PFAFRRKAGC QYYAPHLDT GNWPWTSPKD GGLGDVRYRY CLTTLTVPQR CIGFARRRVG RGGRVLLDRA HSDYDSVFHH LDLEMLSSPQ HSPVNFANT SETNTSDKSF SKDLSQILVN IKSCRWRHFR PRTPSLHDS NDELSCRKLY RSINRTGTAQ PGTQTCSTST QSKSSSGSAH FAFTAEQYQQ HQQQLALMQK QQLAQIQQQ ANSNSSTNTS QNLASNQKKS GFRLNIQGLE RTLQGFVSKT LDSASAQFAA SALVTSEQLM GFKMKDDVVL GIGVNGVLPV SGVYKGLHLS STTPTALVHT SPSTAGSALL
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QPSNITQTSS SHSALSHQVT AANSATTQVL IGNNIRLTVP SSVATVNSIA PINARHIPRT
LSAVPSSALK LAAAANCQVS KVPSSSSVDS VPRENHESEK PALNNIADNT VAMEVT

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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 in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Product Details

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	EPC1
Alternative Name:	EPC1 (EPC1 Products)
Background:	Enhancer of polycomb homolog 1,FUNCTION: Component of the NuA4 histone acetyltransferase (HAT) complex, a multiprotein complex involved in transcriptional activation of select genes principally by acetylation of nucleosomal histones H4 and H2A (PubMed:14966270). The NuA4 complex plays a direct role in repair of DNA double-strand breaks (DSBs) by promoting homologous recombination (HR) (PubMed:27153538). The NuA4 complex is also required for spermatid development by promoting acetylation of histones: histone acetylation is required for histone replacement during the transition from round to elongating spermatids (By similarity). In the NuA4 complex, EPC1 is required to recruit MBTD1 into the complex (PubMed:32209463). {ECO:0000250 UniProtKB:Q8C9X6, ECO:0000269 PubMed:14966270, ECO:0000269 PubMed:27153538, ECO:0000269 PubMed:32209463}.
Molecular Weight:	93.5 kDa
UniProt:	Q9H2F5
Pathways:	Regulation of Muscle Cell Differentiation

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
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Application Details

	guarantee though.
Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p>
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process