

Datasheet for ABIN3092484

**EZH1 Protein (AA 1-747) (Strep Tag)****1** Image[Go to Product page](#)

## Overview

Quantity:	1 mg
Target:	EZH1
Protein Characteristics:	AA 1-747
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This EZH1 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

## Product Details

Sequence:	MEIPNPPTSK CITYWKRKVK SEYMRLRQLK RLQANMGAKA LYVANFAKVQ EKTQILNEEW KKLRVQPVQS MKPVSGHPFL KKCTIESIFP GFASQHMLMR SLNTVALVPI MYSWSPLQQN FMVEDETVLC NIPYMGDEVK EEDETFIEEL INNYDGKVVHG EEEMIPGSVL ISDAVFLELV DALNQYSDEE EEGHNDSG KQDDSKEDLP VTRKRKRHAI EGNKKSSKKQ FPNDMIFSAI ASMPFENGVP DDMKERYREL TEMSDPNALP PQCTPNIDGP NAKSVQREQS LHSFHTLFCR RCFKYDCFLH PFHATPNVYK RKNKEIKIEP EPCGTDCFL LEGAKEYAML HNPRSKCSGR RRRRHHIVSA SCSNASASAV AETKEGDSR DTGNDWASSS SEANSRCQTP TKQKASPAPP QLCVVEAPSE PVEWTGAEES LFRVFHGTYP NNFCSIARLL GTKTCKQVFQ FAVKESLILK LPTDELMNPS QKKKRKHRLW AAHCRKIQLK KDNSSTQVYN YQPCDHPDRP CDSTCPCIMT QNFCEKFCQC NPDCQNRFPD CRCKTQCNTK QCPCYLAVRE CDPDLCLTCG ASEHWDCKV SCKNCSIQRG LKKHLLAPS DVAGWGTFIK ESQKNEFIS EYCGELISQD EADRRGKVYD KYMSSFLFNL NDNFVVDATR KGNKIRFANH SVNPNCYAKV VMVNGDHRIG IFAKRAIQAG
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EELFFDYRYS QADALKYVGI ERETDLV

**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.**

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### 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.

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### Purification:

Two step purification of proteins expressed in Almost Living Cell-Free Expression System

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## Product Details

(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: EZH1

Alternative Name: EZH1 ([EZH1 Products](#))

Background: Histone-lysine N-methyltransferase EZH1 (EC 2.1.1.356) (ENX-2) (Enhancer of zeste homolog 1),FUNCTION: Polycomb group (PcG) protein. Catalytic subunit of the PRC2/EED-EZH1 complex, which methylates 'Lys-27' of histone H3, leading to transcriptional repression of the affected target gene. Able to mono-, di- and trimethylate 'Lys-27' of histone H3 to form H3K27me1, H3K27me2 and H3K27me3, respectively. Required for embryonic stem cell derivation and self-renewal, suggesting that it is involved in safeguarding embryonic stem cell identity. Compared to EZH2-containing complexes, it is less abundant in embryonic stem cells, has weak methyltransferase activity and plays a less critical role in forming H3K27me3, which is required for embryonic stem cell identity and proper differentiation. {ECO:0000269|PubMed:19026781}.

Molecular Weight: 85.3 kDa

UniProt: [Q92800](#)

## 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

## Application Details

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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)

## Images



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