

Datasheet for ABIN3094544

**PHF19 Protein (AA 1-580) (Strep Tag)****1** Image[Go to Product page](#)

## Overview

Quantity:	1 mg
Target:	PHF19
Protein Characteristics:	AA 1-580
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PHF19 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

## Product Details

Sequence: MENRALDPGT RDSYGATSHL PNKGALAKVK NNFKDLMSKL TEGQYVLCRW TDGLYYLGKI  
KRVSSSKQSC LVT FEDNSKY WVLWKDIQHA GVPGEETPCN ICLGKTSGPL NEILICGKCG  
LGYHQQCHIP IAGSADQPLL TPWFCCRIF ALAVRKGGAL KKGAIARTLQ AVKMLVSYQP  
EELEWDSPIR TNQQQCYCYC GGPGEWYLRM LQCYRCRQWF HEACTQCLNE PMMFGDRFYI  
FFCSVCNQGP EYIERLPLRW VDVVHLALYN LGVQSKKKYF DFEEILAFVN HHWELLQLGK  
LTSTPVTDRG PHLLNALNSY KSRFLCGKEI KKKKCFRLR IRVPPNPPGK LLPDKGLLPN  
ENSASSELRK RGKSKPGLLP HEFQQQKRRV YRRKRSKFLI EDAIPSSDFT SAWSTNHHLA  
SIFDFTLDEI QSLKSASSGQ TFFSDVDSTD AASTSGSAST SLSYDSRWTV GSRKRKLAAC  
AYMPLRAKRW AAELDGRCPD DSSAEGASVP ERPDEGIDSH TFESISDDDS SLSHLKSSIT  
NYFGAAGRLA CGEKYQVLAR RVTPEGKVQY LVEWEGTTPY

**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 (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.

## Product Details

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:	PHF19
Alternative Name:	PHF19 ( <a href="#">PHF19 Products</a> )
Background:	<p>PHD finger protein 19 (Polycomb-like protein 3) (hPCL3),FUNCTION: Polycomb group (PcG) protein that specifically binds histone H3 trimethylated at 'Lys-36' (H3K36me3) and recruits the PRC2 complex, thus enhancing PRC2 H3K27me3 methylation activity (PubMed:15563832, PubMed:18691976, PubMed:23160351, PubMed:23228662, PubMed:23273982, PubMed:29499137, PubMed:23104054, PubMed:31959557). Probably involved in the transition from an active state to a repressed state in embryonic stem cells: acts by binding to H3K36me3, a mark for transcriptional activation, and recruiting H3K36me3 histone demethylases RIOX1 or KDM2B, leading to demethylation of H3K36 and recruitment of the PRC2 complex that mediates H3K27me3 methylation, followed by de novo silencing (PubMed:23160351). Recruits the PRC2 complex to CpG islands and contributes to embryonic stem cell self-renewal. Also binds histone H3 dimethylated at 'Lys-36' (H3K36me2) (PubMed:23104054). Isoform 1 and isoform 2 inhibit transcription from an HSV-tk promoter (PubMed:15563832). {ECO:0000269 PubMed:15563832, ECO:0000269 PubMed:18691976, ECO:0000269 PubMed:23104054, ECO:0000269 PubMed:23160351, ECO:0000269 PubMed:23228662, ECO:0000269 PubMed:23273982, ECO:0000269 PubMed:29499137, ECO:0000269 PubMed:31959557}.</p>
Molecular Weight:	65.6 kDa
UniProt:	<a href="#">Q5T6S3</a>
Pathways:	<a href="#">Stem Cell Maintenance</a>

## Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
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Application Details

	as well. As the protein has not been tested for functional studies yet we cannot offer a 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