

Datasheet for ABIN3094574

PHF1 Protein (AA 1-567) (His tag)



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1 Image

Overview

Quantity:	1 mg
Target:	PHF1
Protein Characteristics:	AA 1-567
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PHF1 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence: MAQPPRLSRS GASSLWDPAS PAPTSGPRPR LWEGQDVLAR WTDGLLYLGT IKKVDSAREV
 CLVQFEDDSQ FLVLWKDISP AALPGEELLC CVCRSETVVP GNRLVSCEKC RHAYHQDCHV
 PRAPAPGEGE GTSWVCRQCV FAIATKRGA LKKGPIYARAM LGMKLSLPYG LKGLDWDAGH
 LSNRQSYCY CGGPGEWNLK MLQCRSCLQW FHEACTQCLS KPLLYGDRFY EFECCVCRGG
 PEKVRRQLR WVDVAHLVLY HLSVCCKKKY FDFDREILPF TSENWDSLLL GELS DTPKGE
 RSSRLLSALN SHKDRFISGR EIKKRKCLFG LHARMPPPVE PPTGDGALTS FPSGQGPGGG
 VSRPLGKRRR PEPEPLRRRQ KGKVEELGPP SAVRNQPEPQ EQRERAHLQR ALQASVSPPS
 PSPNQSYQGS SGYNFRPTDA RCLPSSPIRM FASFHPSAST AGTSGDSGPP DRSPLELHIG
 FPTDIPKSAP HSMTASSSSV SSPSPGLPRR SAPPSPLCRS LSPGTGGGVR GGVGYLSRGD
 PVRVLARRVR PDGSVQYLVE WGGGGIF

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Product Details

- Characteristics:
- Made in Germany - from design to production - by highly experienced protein experts.
 - Human PHF1 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
 - 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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

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.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

- Purification:
- Two step purification of proteins expressed in baculovirus infected SF9 insect cells:
1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. 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: >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility: 0.22 µm filtered

Endotoxin Level: Protein is endotoxin free.

Grade: Crystallography grade

Target Details

Target:	PHF1
Alternative Name:	PHF1 (PHF1 Products)
Background:	<p>Polycomb group (PcG) that specifically binds histone H3 trimethylated at 'Lys-36' (H3K36me3) and recruits the PRC2 complex. Involved in DNA damage response and is recruited at double-strand breaks (DSBs). Acts by binding to H3K36me3, a mark for transcriptional activation, and recruiting the PRC2 complex: it is however unclear whether recruitment of the PRC2 complex to H3K36me3 leads to enhance or inhibit H3K27me3 methylation mediated by the PRC2 complex. According to some reports, PRC2 recruitment by PHF1 promotes H3K27me3 and subsequent gene silencing by inducing spreading of PRC2 and H3K27me3 into H3K36me3 loci (PubMed:18285464 and PubMed:23273982). According to another report, PHF1 recruits the PRC2 complex at double-strand breaks (DSBs) and inhibits the activity of PRC2 (PubMed:23142980). Regulates p53/TP53 stability and prolongs its turnover: may act by specifically binding to a methylated form of p53/TP53. {ECO:0000269 PubMed:18086877, ECO:0000269 PubMed:18285464, ECO:0000269 PubMed:18385154, ECO:0000269 PubMed:23142980, ECO:0000269 PubMed:23150668, ECO:0000269 PubMed:23273982}.</p>
Molecular Weight:	63.1 kDa Including tag.
UniProt:	O43189

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:	In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCl, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.

Handling

Handling Advice:	Avoid repeated freeze-thaw cycles.
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Storage:	-80 °C
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Storage Comment:	Store at -80°C.
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Expiry Date:	Unlimited (if stored properly)
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Images



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