Datasheet for ABIN3094532

PHF8 Protein (AA 1-1060) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	PHF8
Protein Characteristics:	AA 1-1060
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PHF8 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Brand:	AliCE®
Sequence:	MNRSRAIVQR GRVLPPPAPL DTTNLAGRRT LQGRAKMASV PVYCLCRLPY DVTRFMIECD MCQDWFHGSC VGVEEEKAAD IDLYHCPNCE VLHGPSIMKK RRGSSKGHDT HKGKPVKTGS PTFVRELRSR TFDSSDEVIL KPTGNQLTVE FLEENSFSVP ILVLKKDGLG MTLPSPSFTV RDVEHYVGSD KEIDVIDVTR QADCKMKLGD FVKYYYSGKR EKVLNVISLE FSDTRLSNLV ETPKIVRKLS WVENLWPEEC VFERPNVQKY CLMSVRDSYT DFHIDFGGTS VWYHVLKGEK IFYLIRPTNA NLTLFECWSS SSNQNEMFFG DQVDKCYKCS VKQGQTLFIP TGWIHAVLTP VDCLAFGGNF LHSLNIEMQL KAYEIEKRLS TADLFRFPNF ETICWYVGKH ILDIFRGLRE NRRHPASYLV HGGKALNLAF RAWTRKEALP DHEDEIPETV RTVQLIKDLA REIRLVEDIF QQNVGKTSNI FGLQRIFPAG SIPLTRPAHS TSVSMSRLSL PSKNGSKKKG LKPKELFKKA ERKGKESSAL GPAGQLSYNL MDTYSHQALK TGSFQKAKFN ITGACLNDSD DDSPDLDLDG NESPLALLMS NGSTKRVKSL SKSRRTKIAK KVDKARLMAE QVMEDEFDLD SDDELQIDER

LGKEKATLII RPKFPRKLPR AKPCSDPNRV REPGEVEFDI EEDYTTDEDM VEGVEGKLGN GSGAGGILDL LKASRQVGGP DYAALTEAPA SPSTQEAIQG MLCMANLQSS SSSPATSSLQ AWWTGGQDRS SGSSSSGLGT VSNSPASQRT PGKRPIKRPA YWRTESEEEE ENASLDEQDS LGACFKDAEY IYPSLESDDD DPALKSRPKK KKNSDDAPWS PKARVTPTLP KQDRPVREGT RVASIETGLA AAAAKLAQQE LQKAQKKKYI KKKPLLKEVE QPRPQDSNLS LTVPAPTVAA TPQLVTSSSP LPPPEPKQEA LSGSLADHEY TARPNAFGMA QANRSTTPMA PGVFLTQRRP SVGSQSNQAG QGKRPKKGLA TAKQRLGRIL KIHRNGKLLL

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.

Product Details

- 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.

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:	PHF8
Alternative Name:	PHF8 (PHF8 Products)
Background:	Histone lysine demethylase PHF8 (EC 1.14.11.27) (EC 1.14.11.65) (PHD finger protein 8) ([histone H3]-dimethyl-L-lysine(36) demethylase PHF8) ([histone H3]-dimethyl-L-lysine(9) demethylase PHF8),FUNCTION: Histone lysine demethylase with selectivity for the di- and monomethyl states that plays a key role cell cycle progression, rDNA transcription and brain development. Demethylates mono- and dimethylated histone H3 'Lys-9' residue (H3K9Me1 and H3K9Me2), dimethylated H3 'Lys-27' (H3K27Me2) and monomethylated histone H4 'Lys-20' residue (H4K20Me1). Acts as a transcription activator as H3K9Me1, H3K9Me2, H3K27Me2 and H4K20Me1 are epigenetic repressive marks. Involved in cell cycle progression by being required to control G1-S transition. Acts as a coactivator of rDNA transcription, by activating polymerase I (pol I) mediated transcription of rRNA genes. Required for brain development, probably by regulating expression of neuron-specific genes. Only has activity toward H4K20Me1 when nucleosome is used as a substrate and when not histone octamer is used as substrate. May also have weak activity toward dimethylated H3 'Lys-36' (H3K36Me2), however, the relevance of this result remains unsure in vivo. Specifically binds trimethylated 'Lys-4' of histone H3 (H3K4me3), affecting histone demethylase specificity: has weak activity toward H3K9Me2 in absence of H3K4me3, while it has high activity toward H3K9me2 when binding H3K4me3. Positively modulates transcription of histone demethylase KDM5C, acting synergistically with transcription factor ARX, synergy may be related to enrichment of histone H3K4me3 in regulatory elements. {ECO:0000269|PubMed:19843542, ECO:0000269|PubMed:20023638, ECO:0000269|PubMed:20101266, ECO:0000269|PubMed:20208542, ECO:0000269|PubMed:20346720, ECO:0000269|PubMed:20421419, ECO:0000269|PubMed:20531378, ECO:0000269|PubMed:20548336,

Target Details

	ECO:0000269|PubMed:20622853, ECO:0000269|PubMed:20622854, ECO:0000269|PubMed:31691806}.
Molecular Weight:	117.9 kDa
UniProt:	Q9UPP1

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