Datasheet for ABIN3137490

PHF2 Protein (AA 1-1096) (His tag)

1 Image

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Overview

Quantity:	1 mg
Target:	PHF2
Protein Characteristics:	AA 1-1096
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PHF2 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MATVPVYCVC RLPYDVTRFM IECDACKDWF HGSCVGVEEE EAPDIDIYHC PNCEKTHGKS TLKKKRTWHK HGPGPTPDVK PVQNGSQLFI KELRSRTFPS AEDVVSRVPG SQLTVGYMEE HGFTEPILVP KKDGLGLAVP APTFYVSDVE NYVGPERSVD VTDVTKQKDC KMKLKEFVDY YYSTNRKRVL NVTNLEFSDT RMSSFVEPPD IVKKLSWVEN YWPDDALLAK PKVTKYCLIC VKDSYTDFHI DSGGASAWYH VLKGEKIFYL IRPASANISL YERWRSASNH SEMFFADQVD RCYKCTVKQG QTLFIPSGWI YATLTPVDCL AFAGHFLHSL SVEMQMRAYE VERRLKLGSL TQFPNFETAC WYMGKHLLEA FKGSHKSGKQ LPPHLVQGAK ILNGAFRSWT KKQALAEHED ELPEHFRPSQ LIKDLAKEIR LSENASKTVR PEVNAAASSD EVCDGDREKE EPPSPVETTP PRSLLEKVSK KKTSKTVKMP KPSKIPKPPK SPKPPKTLKL KDGSKKKGKK CKESASPTIP NLDLLEAHTK EALTKMEPPK KGKTPKSVLS VPNKDTVHTQ NDMERLEIRE QTKSKSEAKW KYKNSKPDSL LKMEEEQRLE KSPLAGNKDK FSFSFSNRKL LGSKALRPPS SPGVFGALQS FKEDKAKPVR DEYEYVSDDG ELKIDEFPIR RKKSAPKRDL SFLLDKKEAL LMPTSKPKLD

	SAVYKSDDSS DEGSLHIDTD TKPGRNAKVK KESGSSAAGI LDLLQASEEV GALEYNPNSQ PPASPSTQEA IQGMLSMANL QASDSCLQTT WGTGQAKGGS LAAHGARKIG GGNKGTGKRL LKRTAKNSVD LEDYEEQDHL DACFKDSDYV YPSLESDEDN PVFKSRSKKR KGSDDAPYSP TARVGPSVPR QDRPVREGTR VASIETGLAA AAAKLSQQEE QKNRKKKNTK RKPAPNTASP SISTSASAST GTTSASTTPA STTPASTTPA STTPASTSTA SSQASQEGSS PEPPPESHSS SLADHEYTAA GTFSGSQAGR ASQPMAPGVF LTQRRPSASS PNNTAAKGKR TKKGMATAKQ RLGKILKIHR NGKLLL **Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**
Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Mouse Phf2 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 receival 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

Product Details

	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:	PHF2
Alternative Name:	Phf2 (PHF2 Products)
Background:	Lysine demethylase that demethylates both histones and non-histone proteins. Enzymatically inactive by itself, and becomes active following phosphorylation by PKA: forms a complex with ARID5B and mediates demethylation of methylated ARID5B. Demethylation of ARID5B leads to target the PHF2-ARID5B complex to target promoters, where PHF2 mediates demethylation of dimethylated 'Lys-9' of histone H3 (H3K9me2), followed by transcription activation of target genes. The PHF2-ARID5B complex acts as a coactivator of HNF4A in liver. PHF2 is recruited to trimethylated 'Lys-4' of histone H3 (H3K4me3) at rDNA promoters and promotes expression of rDNA (By similarity). {ECO:0000250}.
Molecular Weight:	121.8 kDa Including tag.
UniProt:	Q9WTU0

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 gurantee though.
Comment:	Protein has not been tested for activity yet. 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 Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

Images

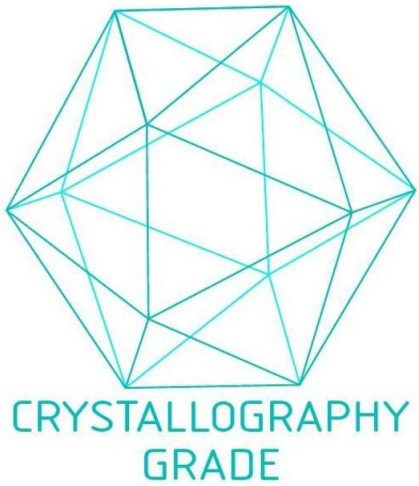

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process