Datasheet for ABIN7554975

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

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Overview

Quantity:	1 mg
Target:	PHF2
Protein Characteristics:	AA 1-1096
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PHF2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant PHF2 Protein expressed in mammalian cells.
Sequence:	MATVPVYCVC RLPYDVTRFM IECDACKDWF HGSCVGVEEE EAPDIDIYHC PNCEKTHGKS TLKKKRTWHK HGPGQAPDVK PVQNGSQLFI KELRSRTFPS AEDVVARVPG SQLTLGYMEE HGFTEPILVP KKDGLGLAVP APTFYVSDVE NYVGPERSVD VTDVTKQKDC KMKLKEFVDY YYSTNRKRVL NVTNLEFSDT RMSSFVEPPD IVKKLSWVEN YWPDDALLAK PKVTKYCLIC VKDSYTDFHI DSGGASAWYH VLKGEKTFYL IRPASANISL YERWRSASNH SEMFFADQVD KCYKCIVKQG QTLFIPSGWI YATLTPVDCL AFAGHFLHSL SVEMQMRAYE VERRLKLGSL TQFPNFETAC WYMGKHLLEA FKGSHKSGKQ LPPHLVQGAK ILNGAFRSWT KKQALAEHED ELPEHFKPSQ LIKDLAKEIR LSENASKAVR PEVNTVASSD EVCDGDREKE EPPSPIEATP PQSLLEKVSK KKTPKTVKMP KPSKIPKPPK PPKPPRPPKT LKLKDGGKKK GKKSRESASP TIPNLDLLEA HTKEALTKME PPKKGKATKS VLSVPNKDVV HMQNDVERLE IREQTKSKSE AKWKYKNSKP DSLLKMEEEQ KLEKSPLAGN KDNKFSFSFS NKKLLGSKAL RPPTSPGVFG ALQNFKEDKP KPVRDEYEYV SDDGELKIDE FPIRRKKNAP KRDLSFLLDK KAVLPTPVTK

Product Details

	PKLDSAAYKS DDSSDEGSLH IDTDTKPGRN ARVKKESGSS AAGILDLLQA SEEVGALEYN PSSQPPASPS TQEAIQGMLS MANLQASDSC LQTTWGAGQA KGSSLAAHGA RKNGGGSGKS AGKRLLKRAA KNSVDLDDYE EEQDHLDACF KDSDYVYPSL ESDEDNPIFK SRSKKRKGSD DAPYSPTARV GPSVPRQDRP VREGTRVASI ETGLAAAAAK LSQQEEQKSK KKKSAKRKLT PNTTSPSTST SISAGTTSTS TTPASTTPAS TTPASTSTAS SQASQEGSSP EPPPESHSSS LADHEYTAAG TFTGAQAGRT SQPMAPGVFL TQRRPSASSP NNNTAAKGKR TKKGMATAKQ RLGKILKIHR NGKLLL **Sequence without tag. The proposed Purification-Tag is based on experiences 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.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalian cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • 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. If you are not interested in a full length protein, please contact us for individual protein fragments. 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.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	PHF2
Alternative Name:	PHF2 (PHF2 Products)
Background:	Lysine-specific demethylase PHF2 (EC 1.14.11.-) (GRC5) (PHD finger protein 2),FUNCTION: Lysine demethylase that demethylates both histones and non-histone proteins

Target Details

	(PubMed:20129925, PubMed:21167174, PubMed:21532585). Enzymatically inactive by itself, and becomes active following phosphorylation by PKA: forms a complex with ARID5B and mediates demethylation of methylated ARID5B (PubMed:21532585). 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 (PubMed:21532585). 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 (PubMed:21532585). Involved in the activation of toll-like receptor 4 (TLR4)-target inflammatory genes in macrophages by catalyzing the demethylation of trimethylated histone H4 lysine 20 (H4K20me3) at the gene promoters (By similarity). {ECO:0000250|UniProtKB:Q9WTU0, ECO:0000269|PubMed:20129925, ECO:0000269|PubMed:21167174, ECO:0000269|PubMed:21532585}.
Molecular Weight:	120.8 kDa
UniProt:	O75151

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition 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:	12 months