

Datasheet for ABIN7554882
PAF1/PD2 Protein (AA 1-531) (His tag)



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Overview

Quantity:	1 mg
Target:	PAF1/PD2 (PAF1)
Protein Characteristics:	AA 1-531
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PAF1/PD2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant PAF1 Protein expressed in mammalian cells.
Sequence:	<p>MAPT¹IQTQAQ REDGHRPNSH RTLPERSGVV CRVKYCNSLP DIPFDPKFIT YPFDQNR²FVQ YKATSLEKQH KHDLLTEPDL GVTIDLINPD TYRIDPNVLL DPADEKLLEE EIQA³PTSSKR SQQHAKVVPW MRKTEYISTE FNRYGISNEK PEVKIGVSVK QQFTEEEIYK DRDSQITAIE KTFEDAQKSI SQHYSKPRVT PVEVMPVFPD FKMWINPCAQ VIFSDPAPK DTSGAAALEM MSQAMIRGMM DEEGNQFVAY FLPVEETLKK RKR⁴DQEEEMD YAPDDVYDYK IAREYNWNVK NKASKGYEEN YFFIFREGDG VYYNELETRV RLSKRRAKAG VQSGTNALLV VKHRDMNEKE LEAQEARKAQ LENHEPEEEEE EEEMETEEKE AGGSDEEQEK GSSSEKEGSE DEHSGSESER EEGDRDEASD KSGSGE⁵DESS EDEARAARDK EEIFGSDADS EDDADSDD⁶ED RGQAQGGSDN DSDSGSNGGG QRSRSHSRSA SPFPSGSEHS AQEDGSEAAA SDSSEADSDS D 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.</p>

Product Details

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: PAF1/PD2 (PAF1)

Alternative Name: PAF1 ([PAF1 Products](#))

Background: RNA polymerase II-associated factor 1 homolog (hPAF1) (Pancreatic differentiation protein 2),FUNCTION: Component of the PAF1 complex (PAF1C) which has multiple functions during transcription by RNA polymerase II and is implicated in regulation of development and maintenance of embryonic stem cell pluripotency. PAF1C associates with RNA polymerase II through interaction with POLR2A CTD non-phosphorylated and 'Ser-2'- and 'Ser-5'-phosphorylated forms and is involved in transcriptional elongation, acting both independently and synergistically with TCEA1 and in cooperation with the DSIF complex and HTATSF1. PAF1C is required for transcription of Hox and Wnt target genes. PAF1C is involved in hematopoiesis and stimulates transcriptional activity of KMT2A/MLL1, it promotes leukemogenesis through association with KMT2A/MLL1-rearranged oncoproteins, such as KMT2A/MLL1-MLL3/AF9 and KMT2A/MLL1-MLL1/ENL. PAF1C is involved in histone

Target Details

modifications such as ubiquitination of histone H2B and methylation on histone H3 'Lys-4' (H3K4me3). PAF1C recruits the RNF20/40 E3 ubiquitin-protein ligase complex and the E2 enzyme UBE2A or UBE2B to chromatin which mediate monoubiquitination of 'Lys-120' of histone H2B (H2BK120ub1), UB2A/B-mediated H2B ubiquitination is proposed to be coupled to transcription. PAF1C is involved in mRNA 3' end formation probably through association with cleavage and poly(A) factors. In case of infection by influenza A strain H3N2, PAF1C associates with viral NS1 protein, thereby regulating gene transcription. Connects PAF1C with the RNF20/40 E3 ubiquitin-protein ligase complex. Involved in polyadenylation of mRNA precursors. Has oncogenic activity in vivo and in vitro. {ECO:0000269|PubMed:16491129, ECO:0000269|PubMed:19410543, ECO:0000269|PubMed:19952111, ECO:0000269|PubMed:20178742, ECO:0000269|PubMed:20541477, ECO:0000269|PubMed:21329879, ECO:0000269|PubMed:22419161}.

Molecular Weight: 60.0 kDa

UniProt: [Q8N7H5](#)

Pathways: [Cellular Response to Molecule of Bacterial Origin, Stem Cell Maintenance](#)

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