

PAF1 Antibody (C-term) Blocking Peptide Synthetic peptide

Catalog # BP17025b

Specification

PAF1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

<u>Q8N7H5</u>

PAF1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 54623

Other Names

RNA polymerase II-associated factor 1 homolog, hPAF1, Pancreatic differentiation protein 2, PAF1, PD2

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PAF1 Antibody (C-term) Blocking Peptide - Protein Information

Name PAF1

Synonyms PD2

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-MLLT3/AF9 and KMT2A/MLL1-MLLT1/ENL. PAF1C is involved in histone 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.

Cellular Location Nucleus. Note=Punctuate distribution throughout the nucleus except in nucleoli and the perinuclear chromatin

PAF1 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

<u>Blocking Peptides</u>

PAF1 Antibody (C-term) Blocking Peptide - Images

PAF1 Antibody (C-term) Blocking Peptide - Background

PAF1, parafibromin (CDC73; MIM 607393), LEO1 (MIM 610507), and CTR9 (MIM 609366) form the PAF protein complex that associates with the RNA polymerase II subunit POLR2A (MIM 180660) and with ahistone methyltransferase complex (Rozenblatt-Rosen et al., 2005[PubMed 15632063]). The PAF complex also has a role in histonemonoubiquitination (Zhu et al., 2005 [PubMed 16307923]).[suppliedby OMIM].

PAF1 Antibody (C-term) Blocking Peptide - References

Muntean, A.G., et al. Cancer Cell 17(6):609-621(2010)Kim, J., et al. Cell 140(4):491-503(2010)Moniaux, N., et al. PLoS ONE 4 (9), E7077 (2009) :Olsen, J.V., et al. Cell 127(3):635-648(2006)Moniaux, N., et al. Oncogene 25(23):3247-3257(2006)