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PAF1 Rabbit pAb

Catalog # AP97717

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q8N7H5
Other Accession	Q8N7H5
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	59976
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PAF1
Epitope Specificity	251-350/531
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the PAF1 family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a subunit of the polymerase associated factor (PAF1) complex. The PAF1 complex interacts with RNA polymerase II and plays a role in transcription elongation as well as histone modifications including ubiquitylation and methylation. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Feb 2012]

Additional Information

Gene ID	54623
Other Names	F23149_1; PD2; 5730511K23Rik; RGD1306219; XELAEV_18039409mg; paf1; PAF1_HUMAN; hPAF1; Pancreatic differentiation protein 2; PAF1_MOUSE; PAF1_RAT; PAF1_XENLA; PAF1 component of Paf1/RNA polymerase II complex; PAF1 homolog, Paf1/RNA polymerase II complex component; Paf1, RNA polymerase II associated factor, homolog (S. cerevisiae)
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

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