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PAF1 antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI14679

Product Information

Application	WB
Primary Accession	Q8N7H5
Other Accession	NM_019088, NP_061961
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	59976

Additional Information

Gene ID	54623
Alias Symbol	F23149_1, FLJ11123, PD2
Other Names	RNA polymerase II-associated factor 1 homolog, hPAF1, Pancreatic differentiation protein 2, PAF1, PD2
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-PAF1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	PAF1 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

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.

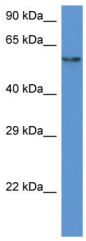
PAF1C is involved in hematopoiesis and stimulates transcriptional activity of KMT2A/MLL1; it promotes leukemogenesis through association with KMT2A/MLL1-rearranged oncoproteins, such as KMT2A/MLL1-MLLT3/AF9 and KMT2A/MLL1-MLLT1/ENL. PAF1C is involved in histone modifications such as ubiquitination of 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

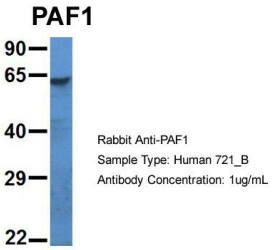
References

Moniaux N.,et al.Oncogene 25:3247-3257(2006).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Grimwood J.,et al.Nature 428:529-535(2004).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Zhu B.,et al.Genes Dev. 19:1668-1673(2005).

Images

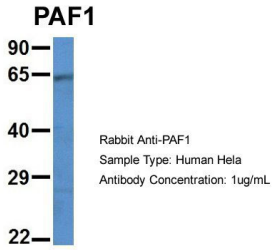


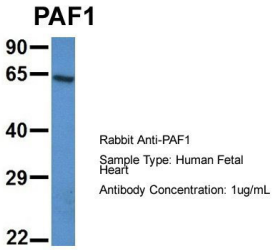
WB Suggested Anti-PAF1 Antibody Titration: 1.0 µg/ml
Positive Control: HepG2 Whole Cell



Host:Rabbit
Target Name:PAF1
Sample Tissue:Human 721_B
Antibody Dilution: 1.0µg/mlPAF1 is supported by BioGPS gene expression data to be expressed in 721_B

Host:Rabbit
Target Name:PAF1
Sample Tissue:Human Hela
Antibody Dilution: 1.0µg/mlPAF1 is supported by BioGPS gene expression data to be expressed in HeLa





Host:Rabbit
Target Name:PAF1
Sample Tissue:Human Fetal Heart
Antibody Dilution: 1.0μg/ml