

# PAF1 Rabbit mAb

Catalog # AP78268

#### **Product Information**

Application WB
Primary Accession <u>Q8N7H5</u>

**Reactivity** Rat, Human, Mouse

**Host** Rabbi

**Clonality** Monoclonal Antibody

**Isotype** IgG

**Conjugate** Unconjugated

**Immunogen** A synthesized peptide derived from human PAF1

**Purification** Affinity Purified

Calculated MW 59976

### **Additional Information**

**Gene ID** 54623

Other Names PAF1

**Dilution** WB~~1/500-1/1000

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

**Storage** Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

### **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

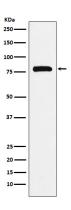
KMT2A/MLL1-rearranged oncoproteins, such as KMT2A/MLL1-MLLT3/AF9 and KMT2A/MLL1-MLLT1/ENL. PAF1C is involved in histone modifications such as

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

## **Images**



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