

## RTF1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16561c

## **Specification**

# RTF1 Antibody (Center) - Product Information

Application WB,E
Primary Accession Q92541

Other Accession A2AQ19, NP 055953.3

Reactivity
Predicted
Host
Clonality
Isotype
Calculated MW
Antigen Region

Human
Mouse
Rabbit
Polyclonal
Rabbit IgG
A82-510

## RTF1 Antibody (Center) - Additional Information

## **Gene ID 23168**

### **Other Names**

RNA polymerase-associated protein RTF1 homolog, RTF1, KIAA0252

## Target/Specificity

This RTF1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 482-510 amino acids from the Central region of human RTF1.

## **Dilution**

WB~~1:1000

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

## **Precautions**

RTF1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## RTF1 Antibody (Center) - Protein Information

### Name RTF1

Synonyms KIAA0252



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. Binds single-stranded DNA. Required for maximal induction of heat-shock genes. Required for the trimethylation of histone H3 'Lys-4' (H3K4me3) on genes involved in stem cell pluripotency; this function is synergistic with CXXC1 indicative for an involvement of a SET1 complex (By similarity).

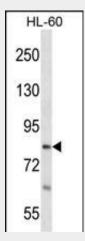
**Cellular Location** Nucleus, nucleoplasm.

# RTF1 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## RTF1 Antibody (Center) - Images



RTF1 Antibody (Center) (Cat. #AP16561c) western blot analysis in HL-60 cell line lysates



(35ug/lane). This demonstrates the RTF1 antibody detected the RTF1 protein (arrow).

## RTF1 Antibody (Center) - Background

This locus may represent a gene involved in regulation of transcription elongation and chromatin remodeling, based on studies of similar proteins in other organisms. The encoded protein may bind single-stranded DNA.

# RTF1 Antibody (Center) - References

de Jong, R.N., et al. Structure 16(1):149-159(2008) Warner, M.H., et al. Mol. Cell. Biol. 27(17):6103-6115(2007) Rozenblatt-Rosen, O., et al. Mol. Cell. Biol. 25(2):612-620(2005)