

RTF1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP16561c**Specification**

RTF1 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [O92541](#)**RTF1 Antibody (Center) Blocking Peptide - Additional Information**

Gene ID 23168

Other Names

RNA polymerase-associated protein RTF1 homolog, RTF1, KIAA0252

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.

RTF1 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

RTF1 Antibody (Center) Blocking Peptide - Images**RTF1 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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)