

CTR9 antibody - C-terminal region

Rabbit Polyclonal Antibody

Catalog # AI15141

Product Information

Application	WB
Primary Accession	Q6PD62
Other Accession	NM_014633 , NP_055448
Reactivity	Human, Mouse, Rat, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Pig, Dog, Guinea Pig, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	133502

Additional Information

Gene ID	9646
Alias Symbol	KIAA0155, SH2BP1, TSBP, p150, p150TSP
Other Names	RNA polymerase-associated protein CTR9 homolog, SH2 domain-binding protein 1, CTR9, KIAA0155, SH2BP1
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-CTR9 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	CTR9 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CTR9
Synonyms	KIAA0155, SH2BP1
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. Required for mono- and trimethylation on histone H3 'Lys-4' (H3K4me3) and dimethylation on histone H3 'Lys-79' (H3K4me3). Required for Hox gene transcription. 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 the SET1 complex. Involved in transcriptional regulation of IL6-responsive genes and in JAK-STAT pathway; may regulate DNA-association of STAT3 (By similarity).

Cellular Location	Nucleus speckle {ECO:0000250 UniProtKB:Q62018}.
Tissue Location	Widely expressed..

References

Nagase T.,et al.DNA Res. 2:167-174(1995).
 Ohara O.,et al.Submitted (AUG-1995) to the EMBL/GenBank/DDBJ databases.
 Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
 Zhu B.,et al.Genes Dev. 19:1668-1673(2005).
 Zhu B.,et al.Mol. Cell 20:601-611(2005).

Images

