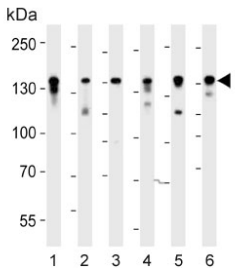
Ctr9 Antibody (F54750)

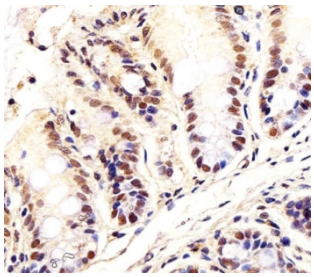
Catalog No.	Formulation	Size
F54750-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F54750-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

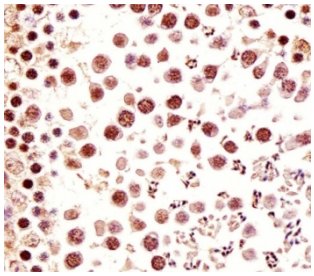
Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity purified
UniProt	Q62018
Localization	Nuclear
Applications	Immunofluorescence: 1:25 Immunohistochemistry (FFPE): 1:25 Western blot: 1:500-1:2000
Limitations	This Ctr9 antibody is available for research use only.



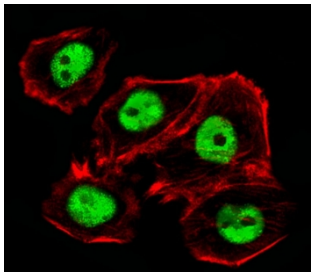
Western blot testing of 1) human Jurkat, 2) human HT-29 and mouse 3) BA/F9, 4) F9, 5) cerebellum and 6) testis tissue lysate with Ctr9 antibody. Predicted molecular weight ~133 kDa.



IHC testing of FFPE mouse colon tissue with Ctr9 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



IHC testing of FFPE mouse testis tissue with Ctr9 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



Immunofluorescent staining of human A431 cells with Ctr9 antibody (green) and anti-Actin (red).

Description

RNA polymerase-associated protein CTR9 homolog is a 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 indepentently 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. 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. Required for mono- and trimethylation on histone H3 'Lys- 4' (H3K4me3) and dimethylation on histone H3 'Lys-79' (H3K4me3). Required for Hox gene transcription (By similarity). 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.

Application Notes

The stated application concentrations are suggested starting points. Titration of the Ctr9 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 1022-1056 from the mouse protein was used as the immunogen for the Ctr9 antibody.

Storage

Aliquot the Ctr9 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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