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Mouse Leo1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21110a

Product Information

Application	WB, E
Primary Accession	Q5XJE5
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB50947
Calculated MW	75597

Additional Information

Gene ID	235497
Other Names	RNA polymerase-associated protein LEO1, Leo1, Gm185
Target/Specificity	This Mouse Leo1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 616-650 amino acids from the C-terminal region of Mouse Leo1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
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	Mouse Leo1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Leo1
Synonyms	Gm185
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. 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. Involved in polyadenylation of mRNA precursors. Connects PAF1C to Wnt signaling (By similarity).

Cellular Location Nucleus.

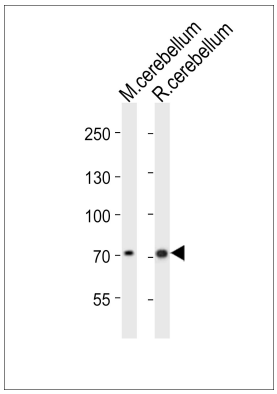
Background

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. Involved in polyadenylation of mRNA precursors. Connects PAF1C to Wnt signaling (By similarity).

References

Church D.M.,et al.PLoS Biol. 7:E1000112-E1000112(2009).
Smith J.C.,et al.J. Proteome Res. 6:3174-3186(2007).
Villen J.,et al.Proc. Natl. Acad. Sci. U.S.A. 104:1488-1493(2007).
Ding L.,et al.Cell Stem Cell 4:403-415(2009).

Images



Western blot analysis of lysates from mouse cerebellum, rat cerebellum tissue lysate (from left to right), using Leo1 Antibody (C-term)(Cat. #AP21110a). AP21110a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.