

#### Leo1-S151 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1978h

#### Specification

#### Leo1-S151 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	<u>Q8WVC0</u>
Other Accession	<u>NP_620147.1</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	75404
Antigen Region	129-158

#### Leo1-S151 Antibody (N-term) - Additional Information

Gene ID 123169

**Other Names** 

RNA polymerase-associated protein LEO1, Replicative senescence down-regulated leo1-like protein, LEO1, RDL

Target/Specificity

This Leo1-S151 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 129-158 amino acids from the N-terminal region of human Leo1-S151.

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** 

Leo1-S151 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# Leo1-S151 Antibody (N-term) - Protein Information

Name LEO1

Synonyms RDL



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 ubiguitin-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. Involved in polyadenylation of mRNA precursors. Connects PAF1C to Wnt signaling.

**Cellular Location** Nucleus.

**Tissue Location** Highly expressed in skeletal muscle and heart. Weakly expressed in placenta and liver.

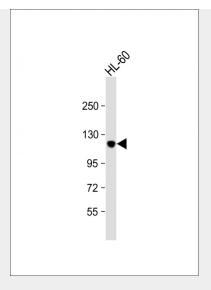
# Leo1-S151 Antibody (N-term) - Protocols

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

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

Leo1-S151 Antibody (N-term) - Images





Anti-Leo1 Antibody (S151) at 1:1000 dilution + HL-60 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 75 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# Leo1-S151 Antibody (N-term) - Background

LEO1, parafibromin (CDC73; MIM 607393), CTR9 (MIM 609366), and PAF1 (MIM 610506) form the PAF protein complex that associates with the RNA polymerase II subunit POLR2A (MIM 180660) and with a histone methyltransferase complex (Rozenblatt-Rosen et al., 2005 [PubMed 15632063]).

# Leo1-S151 Antibody (N-term) - References

Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007) Olsen, J.V., et al. Cell 127(3):635-648(2006) Olsen, J.V., et al. Cell 127(3):635-648(2006) Beausoleil, S.A., et al. Nat. Biotechnol. 24(10):1285-1292(2006) Mosimann, C., et al. Cell 125(2):327-341(2006) Zhu, B., et al. Mol. Cell 20(4):601-611(2005) Zhao, L., et al. FASEB J. 19(6):521-532(2005) Rozenblatt-Rosen, O., et al. Mol. Cell. Biol. 25(2):612-620(2005) Beausoleil, S.A., et al. Proc. Natl. Acad. Sci. U.S.A. 101(33):12130-12135(2004) Beausoleil, S.A., et al. Proc. Natl. Acad. Sci. U.S.A. 101(33):12130-12135(2004)