

**LEO1 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1978a**

**Specification**

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**LEO1 Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O8WVC0</a>
Other Accession	<a href="#">NP_620147</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	75404
Antigen Region	130-159

**LEO1 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 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 130-159 amino acids from the N-terminal region of human LEO1.

**Dilution**

WB~~1:1000-1:2000

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**

LEO1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**LEO1 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 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. Involved in polyadenylation of mRNA precursors. Connects PAF1C to Wnt signaling.

## Cellular Location

Nucleus.

## Tissue Location

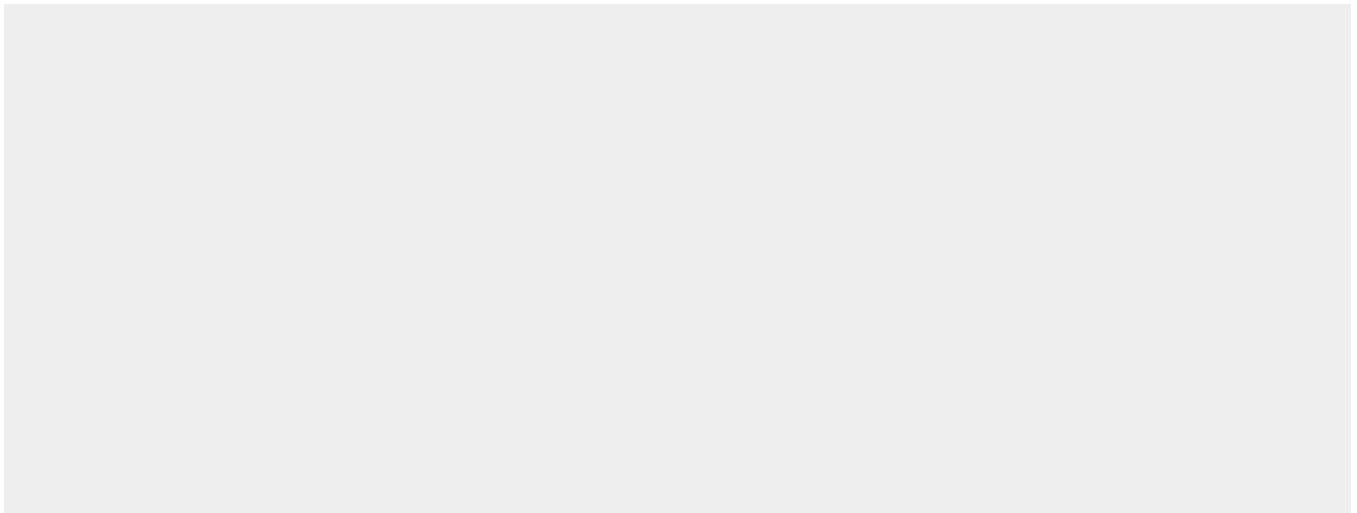
Highly expressed in skeletal muscle and heart. Weakly expressed in placenta and liver.

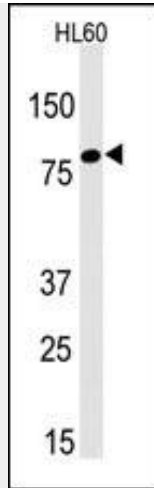
## LEO1 Antibody (N-term) - Protocols

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

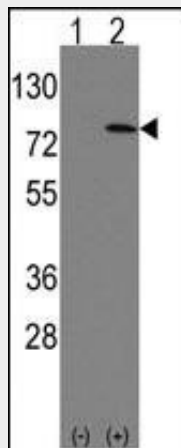
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## LEO1 Antibody (N-term) - Images

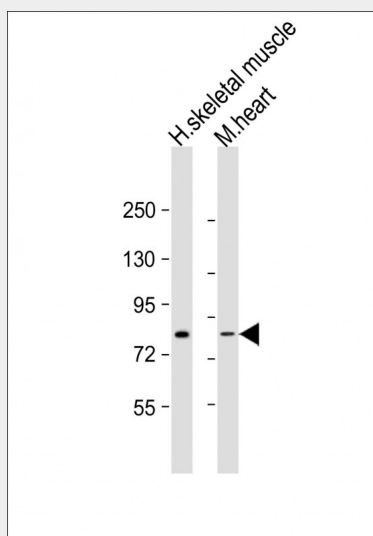




Western blot analysis of anti-Leo1 Antibody (N-term) (Cat. #AP1978a) in HL60 cell line lysates (35ug/lane). Leo1 (arrow) was detected using the purified Pab.



Western blot analysis of Leo1 (arrow) using rabbit polyclonal Leo1 Antibody (Human N-term) (Cat.#AP1978a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the Leo1 gene (Lane 2) (Origene Technologies).



All lanes : Anti-Leo1 Antibody (N-term) at 1:1000-1:2000 dilution Lane 1: human skeletal muscle lysate Lane 2: mouse heart 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 Antibody (N-term) - Background**

The PAF1 complex is a multifunctional complex. The PAF1 complex interacts with POLR2A. It may be involved in both initiation and elongation, histone methylation and RNA processing. Overexpression of LEO1 induces cell growth arrest and premature senescence of fibroblasts.

#### **LEO1 Antibody (N-term) - References**

Zhao,L., FASEB J. 19 (6), 521-532 (2005)