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# Leo1-S171 Blocking Peptide (N-term)

**Synthetic peptide**
**Catalog # BP1978f**

## Specification

### Leo1-S171 Blocking Peptide (N-term) - Product Information

| | |
|---|---|
| Primary Accession | Q8WVC0 |
| Other Accession | NP_620147.1 |

### Leo1-S171 Blocking Peptide (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**
The synthetic peptide sequence is selected from aa 164-178 of HUMAN LEO1

**Format**
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### Leo1-S171 Blocking Peptide (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-S171 Blocking Peptide (N-term) - Protocols

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

- Blocking Peptides

## Leo1-S171 Blocking Peptide (N-term) - Images

## Leo1-S171 Blocking Peptide (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-S171 Blocking Peptide (N-term) - References

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