10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

LEO1 Antibody (S205) Blocking Peptide

Synthetic peptide
Catalog # BP1978d

Specification

LEO1 Antibody (S205) Blocking Peptide - Product Information

Primary Accession	Q8WVC0
Other Accession	NP_620147

LEO1 Antibody (S205) Blocking Peptide - 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 used to generate the antibody AP1978d was selected from the S205 region of human LEO1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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 Antibody (S205) Blocking Peptide - 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 (S205) Blocking Peptide - Protocols

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

- Blocking Peptides

LEO1 Antibody (S205) Blocking Peptide - Images

LEO1 Antibody (S205) Blocking Peptide - Background

The PAF1 complex is a multifunctional complex. The PAF1 complex interacts with POLR2A. 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 (S205) Blocking Peptide - References

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