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WDR61 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18296c

Product Information

Application	WB, E
Primary Accession	Q9GZS3
Other Accession	Q4V7A0, Q9ERF3, Q32LN7, NP_079510.1
Reactivity	Human
Predicted	Bovine, Mouse, Rat, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB38379
Calculated MW	33581
Antigen Region	122-149

Additional Information

Gene ID	80349
Other Names	WD repeat-containing protein 61, Meiotic recombination REC14 protein homolog, SKI8 homolog, Ski8, WD repeat-containing protein 61, N-terminally processed, WDR61
Target/Specificity	This WDR61 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 122-149 amino acids from the Central region of human WDR61.
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	WDR61 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SKIC8 (HGNC:30300)
Synonyms	WDR61

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 (PubMed:16307923, PubMed:19952111, PubMed:20178742). 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 (PubMed:16307923, PubMed:19952111, PubMed:20178742). PAF1C is required for transcription of Hox and Wnt target genes (PubMed:16307923, PubMed:19952111, PubMed:20178742). 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 (PubMed:16307923, PubMed:19952111, PubMed:20178742). PAF1C is involved in histone modifications such as ubiquitination of histone H2B and methylation on histone H3 'Lys-4' (H3K4me3) (PubMed:16307923, PubMed:19952111, PubMed:20178742). 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 (PubMed:16307923, PubMed:19952111, PubMed:20178742). PAF1C is involved in mRNA 3' end formation probably through association with cleavage and poly(A) factors (PubMed:16307923, PubMed:19952111, PubMed:20178742). In case of infection by influenza A strain H3N2, PAF1C associates with viral NS1 protein, thereby regulating gene transcription (PubMed:16307923, PubMed:19952111, PubMed:20178742). Required for mono- and trimethylation on histone H3 'Lys-4' (H3K4me3), dimethylation on histone H3 'Lys-79' (H3K4me3). Required for Hox gene transcription (PubMed:16307923, PubMed:19952111, PubMed:20178742). Also acts as a component of the SKI complex, a multiprotein complex that assists the RNA-degrading exosome during the mRNA decay and quality-control pathways (PubMed:16024656, PubMed:32006463, PubMed:35120588). The SKI complex catalyzes mRNA extraction from 80S ribosomal complexes in the 3'-5' direction and channels mRNA to the cytosolic exosome for degradation (PubMed:32006463, PubMed:35120588). SKI-mediated extraction of mRNA from stalled ribosomes allow binding of the Pelota-HBS1L complex and subsequent ribosome disassembly by ABCE1 for ribosome recycling (PubMed:32006463).
Cellular Location	Nucleus. Cytoplasm

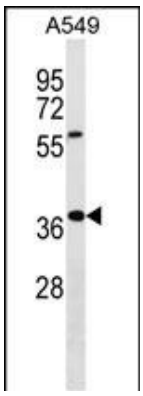
Background

WDR61 is a subunit of the human PAF and SKI complexes, which function in transcriptional regulation and are involved in events downstream of RNA synthesis, such as RNA surveillance (Zhu et al., 2005 [PubMed 16024656]).

References

Lamesch, P., et al. Genomics 89(3):307-315(2007)
Zhu, B., et al. Genes Dev. 19(14):1668-1673(2005)
Barrios-Rodiles, M., et al. Science 307(5715):1621-1625(2005)

Images



WDR61 Antibody (Center) (Cat. #AP18296c) western blot analysis in A549 cell line lysates (35ug/lane).This demonstrates the WDR61 antibody detected the WDR61 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.