

PCAF (Acetyl Lys428) Polyclonal Antibody

Catalog # AP63249

Product Information

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| Application | WB, IHC-P |
| Primary Accession | Q92831 |
| Reactivity | Human, Mouse |
| Host | Rabbit |
| Clonality | Polyclonal |
| Calculated MW | 93013 |

Additional Information

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|---------------------------|--|
| Gene ID | 8850 |
| Other Names | KAT2B; PCAF; Histone acetyltransferase KAT2B; Histone acetyltransferase PCAF; Histone acetylase PCAF; Lysine acetyltransferase 2B; P300/CBP-associated factor; P/CAF |
| Dilution | WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A |
| Format | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide. |
| Storage Conditions | -20°C |

Protein Information

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|-----------------|---|
| Name | KAT2B {ECO:0000303 PubMed:27796307, ECO:0000312 HGNC:HGNC:8638} |
| Function | Functions as a histone acetyltransferase (HAT) to promote transcriptional activation (PubMed: 8945521). Has significant histone acetyltransferase activity with core histones (H3 and H4), and also with nucleosome core particles (PubMed: 8945521). Has a strong preference for acetylation of H3 at 'Lys-9' (H3K9ac) (PubMed: 21131905). Also acetylates non-histone proteins, such as ACLY, MAPRE1/EB1, PLK4, RRP9/U3-55K and TBX5 (PubMed: 10675335 , PubMed: 23001180 , PubMed: 23932781 , PubMed: 26867678 , PubMed: 27796307 , PubMed: 29174768 , PubMed: 9707565). Inhibits cell-cycle progression and counteracts the mitogenic activity of the adenoviral oncoprotein E1A (PubMed: 8684459). Acts as a circadian transcriptional coactivator which enhances the activity of the circadian transcriptional activators: NPAS2-BMAL1 and CLOCK-BMAL1 heterodimers (PubMed: 14645221). Involved in heart and limb development by mediating acetylation of TBX5, acetylation regulating nucleocytoplasmic shuttling of TBX5 (PubMed: 29174768). Acts as a negative regulator of centrosome amplification by mediating acetylation of PLK4 (PubMed: 27796307). |

Acetylates RRP9/U3-55K, a core subunit of the U3 snoRNP complex, impairing pre-rRNA processing (PubMed:[26867678](#)). Acetylates MAPRE1/EB1, promoting dynamic kinetochore-microtubule interactions in early mitosis (PubMed:[23001180](#)). Also acetylates spermidine (PubMed:[27389534](#)).

Cellular Location

Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm Note=Mainly localizes to the nucleus. Also localizes to centrosomes in late G1 and around the G1/S transition, coinciding with the onset of centriole formation. Subcellular location may vary depending upon cell differentiation state. Cytoplasmic at the very stages of keratinocyte differentiation, becomes nuclear at later differentiation stages Cytoplasmic in basal epithelial cells (undifferentiated cells) and nuclear in parabasal cells (differentiated cells) (PubMed:20940255) Localizes to sites of DNA damage (PubMed:25593309)

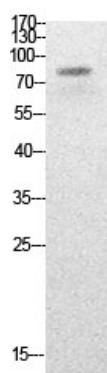
Tissue Location

Ubiquitously expressed but most abundant in heart and skeletal muscle. Also expressed in the skin, in keratinocytes (at protein level) (PubMed:20940255).

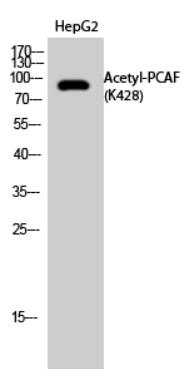
Background

Functions as a histone acetyltransferase (HAT) to promote transcriptional activation. Has significant histone acetyltransferase activity with core histones (H3 and H4), and also with nucleosome core particles. Also acetylates non-histone proteins, such as ACLY, PLK4 and TBX5. Inhibits cell-cycle progression and counteracts the mitogenic activity of the adenoviral oncoprotein E1A. Acts as a circadian transcriptional coactivator which enhances the activity of the circadian transcriptional activators: NPAS2-ARNTL/BMAL1 and CLOCK- ARNTL/BMAL1 heterodimers. Involved in heart and limb development by mediating acetylation of TBX5, acetylation regulating nucleocytoplasmic shuttling of TBX5 (PubMed:[29174768](#)). Acts as a negative regulator of centrosome amplification by mediating acetylation of PLK4 (PubMed:[27796307](#)). Also acetylates spermidine (PubMed:[27389534](#)).

Images



Western Blot analysis of HepG2 cells using Acetyl-PCAF (K428) Polyclonal Antibody.. Secondary antibody was diluted at 1:20000



Western Blot analysis of HepG2 cells using Acetyl-PCAF (K428) Polyclonal Antibody. Secondary antibody was diluted at 1:20000

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