

Anti-PCAF Antibody

Rabbit polyclonal antibody to PCAF Catalog # AP59761

Specification

Anti-PCAF Antibody - Product Information

Application WB, IHC
Primary Accession O92831
Other Accession O9JHD1
Reactivity Human, Mouse, Rat, Pig, Bovine, Dog
Rabbit

Host Rabbit
Clonality Polyclonal
Calculated MW 93013

Anti-PCAF Antibody - Additional Information

Gene ID 8850

Other Names

PCAF; Histone acetyltransferase KAT2B; Histone acetyltransferase PCAF; Histone acetylase PCAF; Lysine acetyltransferase 2B; P300/CBP-associated factor; P/CAF

Target/Specificity

Recognizes endogenous levels of PCAF protein.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200) IHC~~1:100~500

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-PCAF Antibody - Protein Information

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:<a href="http://www.uniprot.org/citations/8945521"

target="_blank">8945521). Has a a strong preference for acetylation of H3 at 'Lys-9' (H3K9ac) (PubMed:<a href="http://www.uniprot.org/citations/21131905"

target=" blank">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).

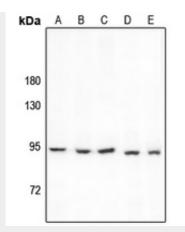
Anti-PCAF Antibody - Protocols

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

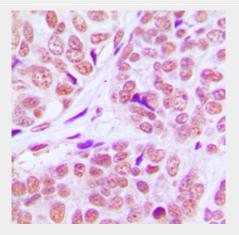
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-PCAF Antibody - Images





Western blot analysis of PCAF expression in HEK293T (A), SGC7901 (B), Panc1 (C), PC12 (D), C6 (E) whole cell lysates.



Immunohistochemical analysis of PCAF staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-PCAF Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human PCAF. The exact sequence is proprietary.