

PCAF, mouse recombinant protein

Histone Acetyltransferase PCAF; Histone Acetyltransferase KAT2B; Lysine Acetyltransferase 2B; P/CAF;
Catalog # PBV11165r

Specification

PCAF, mouse recombinant protein - Product info

Primary Accession
Calculated MW

[O9JHD1](#)

~92 kDa (SDS-PAGE). Mouse PCAF is fused to a His-tag. KDa

PCAF, mouse recombinant protein - Additional Info

Gene ID **18519**
Gene Symbol **Kat2b**

Other Names

Histone Acetyltransferase PCAF; Histone Acetyltransferase KAT2B; Lysine Acetyltransferase 2B; P/CAF; P300/CBP-associated Factor.

Gene Source **Mouse**
Source **Sf21 cells**
Assay&Purity **SDS-PAGE; ≥95%**
Assay2&Purity2 **N/A;**
Recombinant **Yes**
Target/Specificity
PCAF

Format

Liquid

Storage

-80°C; In 50 mM Tris-HCl, pH 7.5, containing 100 mM sodium chloride, 50 mM imidazole, 0.2% NP-40 and 10% glycerol.

PCAF, mouse recombinant protein - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PCAF, mouse recombinant protein - Images

PCAF, mouse recombinant protein - Background

The acetylation of histone lysine residues plays a crucial role in the epigenetic regulation of gene transcription. A bromodomain is a protein domain that recognizes acetylated lysine residues such as those on the N-terminal tails of histones. This recognition is often a prerequisite for protein-histone association and chromatin remodeling. These domains function in the linking of protein complexes to acetylated nucleosomes, thereby controlling chromatin structure and gene expression. Thus, bromodomains serve as “readers” of histone acetylation marks regulating the transcription of target promoters. p300/CBP-associated factor (PCAF) is a transcriptional coactivator that works both as a histone lysine acetyltransferase, through its HAT domain, and as an acetyl-lysine reader through its conserved bromodomain located directly C-terminal to the HAT domain. The PCAF bromodomain binds acetylated histone H3 and H4 as well as non-histone targets. Bromodomain binding is dictated by the position of the acetylated lysine as well as interactions with specific residues flanking the acetyl-lysine. PCAF also specifically binds the HIV viral protein Tat on acetylated K50 to regulate its transactivating activity and help induce chromatin remodeling of proviral genes, thereby promoting transcription of viral proteins.

PCAF, mouse recombinant protein - References

Xu W.,et al.Mol. Cell. Biol. 18:5659-5669(1998).
Carninci P.,et al.Science 309:1559-1563(2005).
Park S.W.,et al.Nat. Struct. Mol. Biol. 14:68-75(2007).
Gupta P.,et al.Proc. Natl. Acad. Sci. U.S.A. 105:11424-11429(2008).