

# Active Human HAT (492-658 aa), human recombinant

**CATALOG NO:** 1137-20 20 µg  
1137-100 100 µg  
1137-500 500 µg

**ALTERNATE NAMES:** p300/CBP-associated factor; KAT2B, Histone acetylase PCAF

**SOURCE:** *E. Coli*

**PURITY:** ≥95% by SDS-PAGE

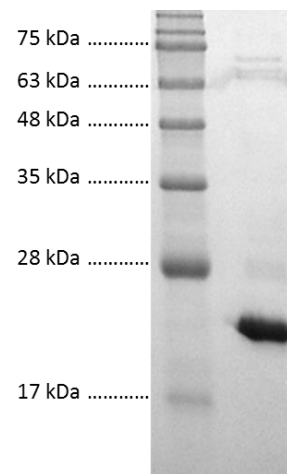
**FORM:** Liquid

**FORMULATION:** 30% Glycerol in PBS

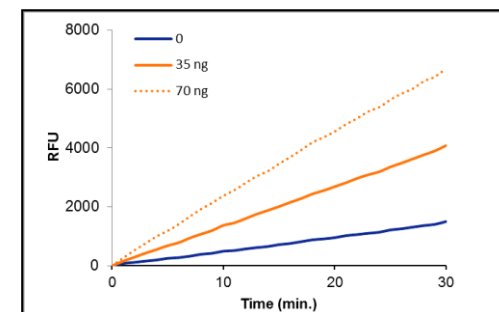
**STORAGE CONDITIONS:** Store at -20°C. Stable for at least 1 year as supplied. For long term storage, use -80°C.

**DESCRIPTION:** 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.

**APPLICATIONS:** Recombinant PCAF is useful in HAT inhibitor screening, kinetic studies and HAT substrate cleavages *in vitro* or in tissue culture. PCAF can also be used as positive control in HAT activity assay (BioVision, Cat. No. K332 and K336)



SDS-PAGE of human recombinant PCAF bromodomain (492-658 aa).



PCAF activity as determined by HAT (H4) Activity Fluorometric Assay Kit (Cat # K336-100)

## RELATED PRODUCTS:

- HAT Activity Colorimetric Assay Kit (K332)
- HAT Activity Fluorometric Assay Kit (K334)
- HAT (H4) Activity Fluorometric Assay Kit (K336)
- Recombinant Human BrdT (7641)
- Recombinant Human BRD4 (7644)
- Bromodomain Inhibitor, (+)-JQ1 (2070)

**FOR RESEARCH USE ONLY! Not to be used in humans.**