

Recombinant KAT2B / PCAF (715-829) protein

Catalog No: 31370, 31770

Lot No: 01317002

Expressed In: *E. coli*

Quantity: 100, 1000 µg

Concentration: 1 µg/µl

Source: Human

Buffer Contents: Recombinant KAT2B / PCAF (715-829) protein expressed in *E. coli* and supplied in 25 mM Tris pH 8.0, 500 mM NaCl, 20% glycerol.

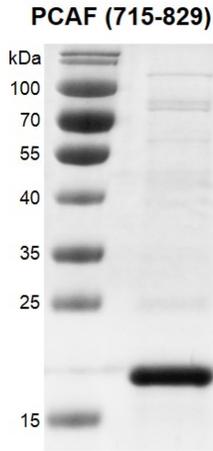
Background: P300/CBP-associated factor (PCAF), also known as K (lysine) acetyltransferase 2B (KAT2B), is a transcriptional coactivator associated with p53 that contains acetyltransferase and E3 ubiquitin ligase domains as well as a bromodomain for interaction with other proteins. The bromodomain functions as a 'reader' of epigenetic histone marks and regulates chromatin structure and gene expression by linking associated proteins to the recognized acetylated nucleosomal targets. KAT2B / PCAF competes with E1A for binding to p300/CBP, which associate with various sequence-specific factors involved in cell growth and/or differentiation, including c-Jun and the adenoviral oncoprotein E1A. KAT2B / PCAF exerts histone acetyltransferase activity in association with core histones (H3 and H4) and with nucleosome core particles, and functions to promote transcriptional activation. KAT2B / PCAF has also been shown to inhibit cell cycle progression and to counteract the mitogenic activity of the adenoviral oncoprotein E1A. In case of HIV-1 infection, KAT2B / PCAF is recruited by the viral protein TAT to regulate TAT's transactivating activity and may help induce chromatin remodeling of proviral genes.

Protein Details: The peptide corresponding to amino acids 715 - 829 that contains the bromodomain sequences of KAT2B / PCAF (accession number NM_003884.4) was expressed in *E. coli* and contains an N-terminal His-Tag and C-terminal FLAG-Tag with an observed molecular weight of 19.8 kDa. It shows binding specificity for acetylated H3K9, H3K14, H3K36, H4K8, H4K16, H4K20 and TATK50. The recombinant protein is >90% pure by SDS-PAGE.

Application Notes: Recombinant KAT2B / PCAF (715-829) is suitable for use in binding assays, inhibitor screening, and selectivity profiling.

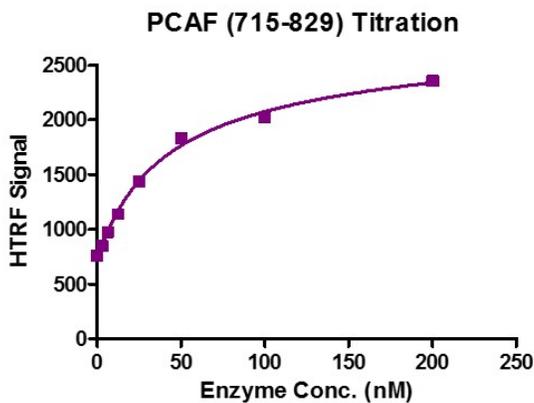
Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



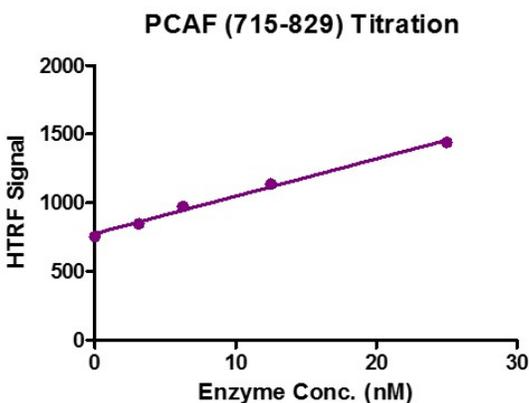
Recombinant KAT2B / PCAF (715-829) protein gel.

PCAF (715-829) protein was run on a 12% SDS-PAGE gel and stained with Coomassie Blue.



HTRF Assay for Recombinant KAT2B / PCAF (715-829) protein activity.

3 μ M histone peptide H4K5/K8/K12/K16 (4ac) was incubated with KAT2B / PCAF(715-829) protein in reaction buffer including 50 mM HEPES-NaOH pH 7.0, 0.1% BSA for 1 hour at room temperature, Anti-Flag antibody was used to detect reaction products.



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