Recombinant KAT2B protein (His tag)

Catalog Number	540912
Synonyms	Histone acetyltransferase PCAF; Histone acetylase PCAF; Lysine acetyltransferase 2B; P300/CBP-associated factor; P/CAF; Spermidine acetyltransferase KAT2B
Species	Human
Expression System	E. coli
Accession	Q92831
Molecular Weight	Predictes a molecular mass of 46.09 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 46 kDa band.

Product Information

Sequence Region	450-832
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 450-832 aa (Q92831) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human KAT2B (PCAF) Fragment (aa 450-832) – a high-purity protein fragment encompassing the essential N-acetyltransferase and Bromo domains. This product is engineered for researchers investigating histone acetylation, transcriptional regulation, and chromatin remodeling, providing a targeted tool for domain-specific functional studies. Histone acetyltransferase KAT2B (PCAF) is a key epigenetic regulator in humans that catalyzes acetylation of histone H3 at Lys-9 (H3K9ac) and nucleosomal histones to activate transcription. Beyond histones, it acetylates diverse substrates including TBX5 (impacting heart/limb development), PLK4 (regulating centrosome amplification), MAPRE1/EB1 (modulating kinetochore-microtubule interactions), and spermidine. KAT2B localizes primarily to the nucleus, with transient centrosomal localization during G1/S transition, and participates in circadian regulation, cell cycle control, and HIV-1 proviral chromatin remodeling via interaction with viral Tat protein. The full-length protein's multifunctional roles underscore the importance of the contained acetyltransferase and bromodomain modules for targeted mechanistic studies.