



Catalog No: 31204 Quantity: 5 μg

Lot No: 00714002 Concentration: 0.1 μg/μl

Expressed In: E. coli Source: Human

Buffer Contents: $5 \mu g$ of Recombinant KAT2A (GCN5) (362-837) protein in 20 mM Tris-HCl pH 7.3, 20% glycerol, 0.2 mM EDTA, 300 mM KCl, 1 mM DTT containing 0.5 mM

PMSF.

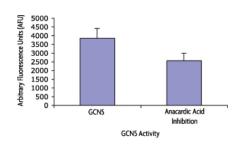
Background: KAT2A (GCN5/General control of nutrition 5), is a component of the ATAC complex, which is a complex that specifically exerts histone acetyltransferase (HAT) activity on histones H3 and H4. KAT2A (GCN5) acts as a histone acetyltransferase to promote transcriptional activation. In the case of HIV-1 infection, it is recruited by the viral protein TAT and regulates TAT's transactivating activity. In addition, evidence suggests KAT2A (GCN5) may play a role in the induction of chromatin remodeling of proviral genes. KAT2A (GCN5) also functions as a repressor of NFκB by promoting ubiquitination of the NFκB subunit RelA in a HAT-independent manner.

Protein Details: Recombinant FLAG-tagged KAT2A (GCN5) (amino acids 362-837) protein is expressed in *E. coli* and purified by affinity chromatography. Protein is supplied at 0.1 mg/ml. The Genbank Accession number for this KAT2A (GCN5) is U57316. The apparent MW is 55 kDa.

Application Notes: This protein has been tested for activity in the fluorescent HAT Assay Kit, Catalog No. 56100. 50 ng of KAT2A (GCN5) (362-837) were assayed per well using 50 μ M histone H3 peptide substrate, 50 μ M Acetyl-CoA and incubated for 30 minutes at room temperature. The assay was read on a fluorescent plate reader (ex. 360-390 nm, em. 450-470 nm). The specific activity was 100 pmol/min/ μ g.

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 KAT2A (GCN5) (362 -837) protein activity assay.

KAT2A (GCN5) (362-837) activity assayed with the fluorescent HAT assay (Catalog No. 56100) using 50 ng of KAT2A (GCN5) (362-837), 50 μM histone H3 peptide substrate (residues 5-23 of human H3), 50 μM Acetyl-CoA and 15 μM Anacardic Acid for inhibition. KAT2A (GCN5) (362-837) was assayed alone to determine background and the resulting value was subtracted from this data.