

Recombinant KAT2A (GCN5) protein

Catalog No: 31591, 31991

Lot No: 12318002

Expressed In: Baculovirus

Quantity: 20, 1000 µg

Concentration: 0.75 µg/µl

Source: Human

Buffer Contents: Recombinant GCN5 protein is supplied at a concentration of 0.75 µg/µl in 25 mM HEPES-NaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100, and 0.5 mM TCEP.

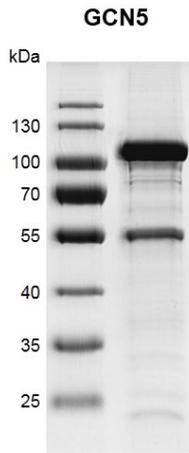
Background: GCN5 (General Control Of Amino Acid Synthesis Protein 5, also known as KAT2A, Lysine Acetyltransferase 2A) is a histone acetyltransferase (HAT) that functions primarily as a transcriptional activator. It also acts as a repressor of NF-kappa-B by promoting ubiquitination of the NF-kappa-B subunit RELA in a HAT-independent manner. KAT2A (GCN5) has significant histone acetyltransferase activity with core histones, but not with nucleosome core particles. It also acetylates non-histone proteins, such as CEBPB. KAT2A (GCN5) is a core component of the ATAC complex, which is a complex with histone acetyltransferase activity on histones H3 and H4.

Protein Details: Recombinant KAT2A (GCN5) protein was expressed in a Baculovirus expression system as the full length protein (accession number NP_066564.2) with an N-terminal FLAG-Tag. The molecular weight of the protein is 95.6 kDa.

Application Notes: Recombinant KAT2A (GCN5) protein is suitable for use in enzyme kinetics, inhibitor screening, and selectivity profiling.

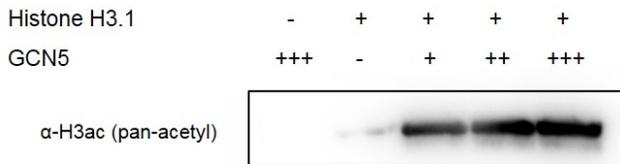
Assay Conditions: 0.5 µg Histone H3.1 (Cat. No. 31294) was incubated with 0 µg (-), 0.1 µg (+), 0.2 µg (++), 0.4 µg (+++) GCN5 protein in a 30 µl reaction system containing 50 mM Tris-HCl pH 8.0, 0.1 mM EDTA, 50 ng/µl BSA, 1 mM TCEP and 20 µM Acetyl-CoA for 2 hours at room temperature. All samples were run on a 12.5% SDS-PAGE gel, and products were detected by Western blot. H3ac (pan-acetyl) antibody (Cat. No. 61637) was used to recognize acetylated histone H3.

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 for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.



Recombinant KAT2A (GCN5) protein, SDS-PAGE gel

Recombinant KAT2A (GCN5) protein was run on a 10% SDS-PAGE gel and stained with Coomassie Blue. MW: 95.6 kDa Purity: > 85%



Recombinant KAT2A (GCN5) protein activity assay

0.5 μ g Histone H3.1 (Cat. No. 31294) was incubated with 0 μ g (-), 0.1 μ g (+), 0.2 μ g (++) , 0.4 μ g (+++) GCN5 catalytic domain in 30 μ l reaction system for 2 hours at room temperature. Products were detected by Western blot. H3ac (pan-acetyl) antibody (Cat. No. 61637) was used to recognize acetylated histone H3.