

## 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.

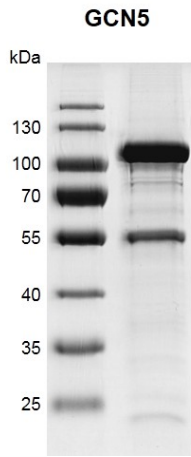
**Background:** GCN5 (General Control Of Amino Acid Synthesis Protein 5, also known as KAT2A, Lysine Acetyltransferase 2A) is a histone acetyltransferase (HAT) that functions primarily as a transcriptional activator. It also acts as a repressor of NF-kappa-B by promoting ubiquitination of the NF-kappa-B 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.

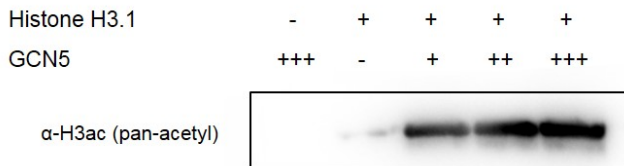
**Assay Conditions:** 0.5 µg Histone H3.1 (Cat. No. 31294) was incubated with 0 µg (-), 0.1 µg (+), 0.2 µg (++) , 0.4 µg (+++) GCN5 protein in a 30 µl reaction system containing 50 mM Tris-HCl pH 8.0, 0.1 mM EDTA, 50 ng/µl BSA, 1 mM TCEP and 20 µM Acetyl-CoA for 2 hours at room temperature. All samples 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  $\mu$ g Histone H3.1 (Cat. No. 31294) was incubated with 0  $\mu$ g (-), 0.1  $\mu$ g (+), 0.2  $\mu$ g (++) , 0.4  $\mu$ g (+++) GCN5 catalytic domain in 30  $\mu$ 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.