

## Certificate of Analysis

### KAT2A (GCN5L2)

#### Human histone acetyltransferase KAT2A

(Recombinant enzyme expressed in *E.coli*)

Item # EPI024

Lot # 139716

**Product Description:** Recombinant human KAT2A (GCN5L2), amino acids 497-662, expressed in *E.coli*. Purified using immobilised metal affinity chromatography.

MW = 19.3kDa.

**Tag cleaved by thrombin protease.**

**Aliases:** PCAF-b

**Formulation:** 1mg/ml of enzyme in 5mM Tris/HCl pH7.4, 250mM NaCl, 50% Glycerol. Frozen solution.

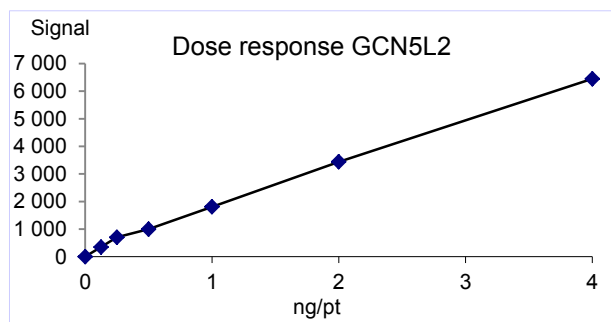
**Storage and Stability:** Stable for 1 year at -70°C from date of shipment. For maximum recovery of product, centrifuge original vial prior to removing the cap.

**Handling Recommendations:** Rapidly thaw the vial under cold water and immediately place on ice. Aliquot unused material into pre-chilled microcentrifuge tubes and store at -70°C.

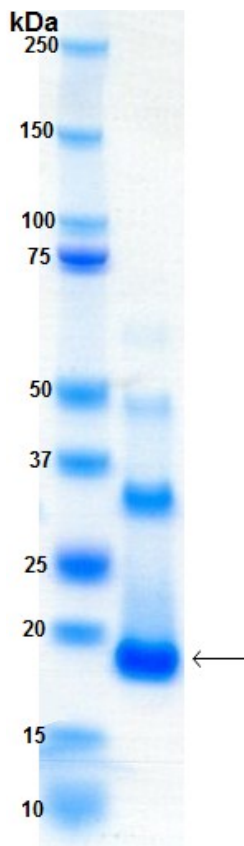
**FOR IN VITRO RESEARCH USE ONLY  
NOT FOR USE IN HUMANS OR ANIMALS**

### Quality Control Testing

**HAT Assay:** 0.125-4ng of this lot of enzyme transferred acetyl groups from [<sup>3</sup>H] Acetyl CoA to histone H3 full length in the assay described on page two. Assay background was subtracted from the actual counts to yield the results shown below.



**MS:** Size was confirmed by mass spectrometry using a Q-TOF.



**SDS-PAGE and Coomassie Stain:** Purity was assessed by SDS-PAGE and Coomassie blue staining using 4µg of KAT2A (GCN5L2).

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### KAT2A (GCN5L2) Assay Protocol

#### Stock Solutions:

1. **Reaction buffer:** 50mM Hepes/Tris pH7.4, 0.1mM EDTA/Tris, 0.01% Triton.
2. **KAT2A (GCN5L2):** Dilute with reaction buffer. Use 0.125-4ng per assay point.
3. **Histone H3 full length:** Dilute with reaction buffer to 2500nM.
4. **[3H] Acetyl CoA:** Dilute with reaction buffer to 150nM.
5. **Filtration Buffer :** 33mM Citric acid pH2.2

#### Assay Procedure (96 well plate format):

1. Add 5µl of 10% DMSO per assay to each well.
2. Add 25µl of [3H] Acetyl CoA.
3. Add 10µl (**0.125-4ng**) **KAT2A (GCN5L2)**.
4. Add 10µl of Histone H3 full length.
5. Incubate for 10 minutes at 22°C.
6. Stop the reaction by filtration on a GF/B Filter. Wash 3 times with filtration buffer.
7. Dry and add scintillation cocktail.
8. Read in a scintillation counter. Compare the signal of enzyme samples with that of a background sample that contains all assay components except the substrate Histone H3 full length.

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### KAT2A (GCN5L2) Sequence Information

<b><u>Protein</u></b>	Human KAT2A (GCN5L2)
<b><u>Tags</u></b>	<i>tag cleaved by thrombin protease</i>
<b><u>Accession number</u></b>	GenBank NP_066564.2

#### **Recombinant KAT2A (GCN5L2) amino acid sequence:**

1 GSGIIEFHVI GNSLTPKANR RVLLWLVGLQ NVFSHQLPRM PKEYIARLVF  
51 DPKHKTLALI KDGRVIGGIC FRMFPTQGFT EIVFCAVTSN EQVKGYGTHL  
101 MNHLKEYHIK HNILYFLTYA DEYAIGYFKK QGFSKDIKVP KSRYLGYIKD  
151 YEGATLMECE LNPRIPYT

Reviewed and approved by site quality representative.

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