


Product datasheet

Anti-KAT2A / GCN5 antibody [EPR21146] - ChIP Grade
ab217876

KO VALIDATED Recombinant RabMAB

3 References 6 Images

Overview

Product name	Anti-KAT2A / GCN5 antibody [EPR21146] - ChIP Grade
Description	Rabbit monoclonal [EPR21146] to KAT2A / GCN5 - ChIP Grade
Host species	Rabbit
Tested applications	Suitable for: ChIP, WB, IP
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat 
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HAP1, HEK-293T, MCF7 and HeLa whole cell lysate; human fetal brain tissue lysate; His-tagged human KAT2A / GCN5 recombinant protein (aa86-336). IP: HeLa whole cell lysate.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAB[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal

Clone number EPR21146
Isotype IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab217876 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ChIP		Use at an assay dependent concentration.
WB		1/1000. Detects a band of approximately 94 kDa (predicted molecular weight: 94 kDa).
IP		1/30.

Target

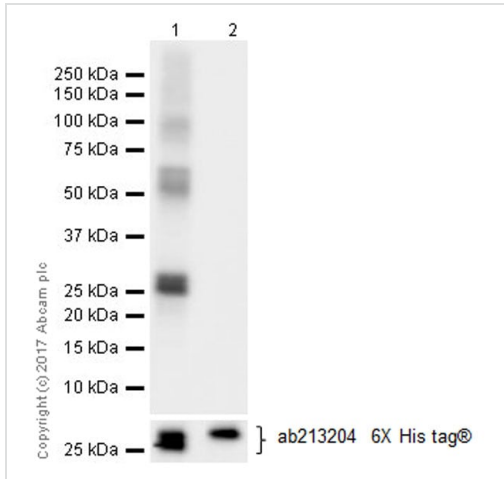
Function Functions as a histone acetyltransferase (HAT) to promote transcriptional activation. Acetylation of histones gives a specific tag for epigenetic transcription activation. Has significant histone acetyltransferase activity with core histones, but not with nucleosome core particles. In case of HIV-1 infection, it is recruited by the viral protein Tat. Regulates Tat's transactivating activity and may help inducing chromatin remodeling of proviral genes. Component of the ATAC complex, a complex with histone acetyltransferase activity on histones H3 and H4.

Tissue specificity Expressed in all tissues tested, with most abundant expression in ovary.

Sequence similarities Belongs to the GCN5 family.
Contains 1 bromo domain.
Contains 1 N-acetyltransferase domain.

Cellular localization Nucleus.

Images



Western blot - Anti-KAT2A / GCN5 antibody [EPR21146] - ChIP Grade (ab217876)

All lanes : Anti-KAT2A / GCN5 antibody [EPR21146] - ChIP Grade (ab217876) at 1/1000 dilution

Lane 1 : His-tagged human KAT2A / GCN5 recombinant protein (aa86-336), 10 ng

Lane 2 : His-tagged human KAT2B recombinant protein (aa74-326), 10 ng

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Developed using the ECL technique.

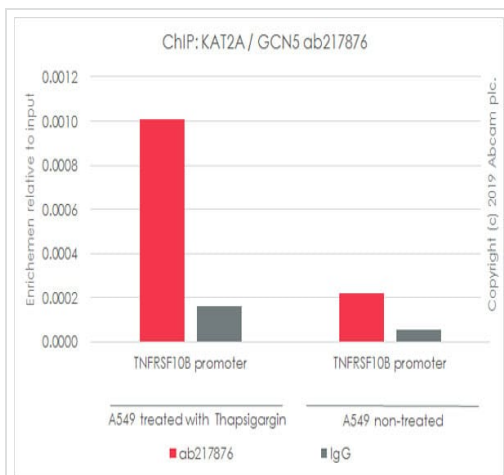
Predicted band size: 94 kDa

Observed band size: 27 kDa

Blocking/Dilution buffer: 5% NFDM/TBST

Exposure time: 1 second

The blot was developed on a BIO-RAD® ChemiDoc™ MP instrument.



ChIP - Anti-KAT2A / GCN5 antibody [EPR21146] - ChIP Grade (ab217876)

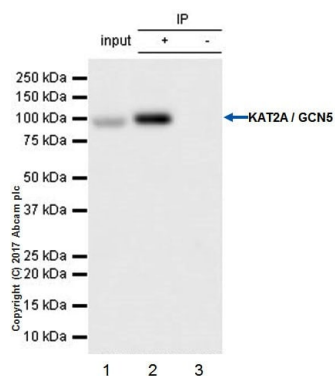
Chromatin was prepared from A549 treated with thapsigargin (1 μ M 12 hours) cells according to the Abcam Dual X-ChIP protocol*. Cells were fixed with EGS for 30 minutes, then formaldehyde for 10 minutes.

The ChIP was performed with 25 μ g of chromatin, 5 μ g of ab217876 (red), and 20 μ l of Protein A/G sepharose beads. 5 μ g of rabbit normal IgG was added to the beads control (gray). The immunoprecipitated DNA was quantified by real time PCR (Sybr green approach).

Primers and probes are located in the first kb of the transcribed region.

*[http://www.abcam.com/resources?](http://www.abcam.com/resources?keywords=X%20ChIP%20protocol)

[keywords=X%20ChIP%20protocol](http://www.abcam.com/resources?keywords=X%20ChIP%20protocol)



Immunoprecipitation - Anti-KAT2A / GCN5 antibody [EPR21146] - ChIP Grade (ab217876)

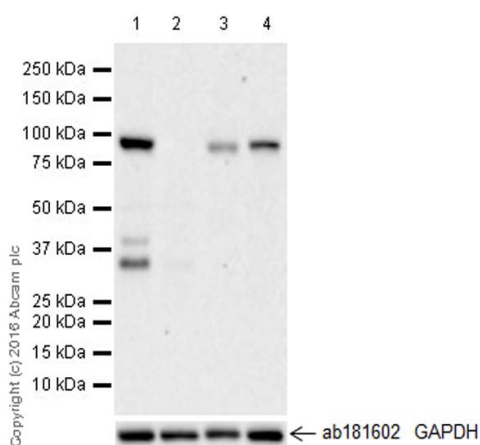
KAT2A / GCN5 was immunoprecipitated from 0.35mg of HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate with ab217876 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab217876 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/5000 dilution.

Lane 1: HeLa whole cell lysate 10ug (Input).

Lane 2: ab217876 IP in HeLa whole cell lysate.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab217876 in HeLa whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.
Exposure time: 30 seconds.



Western blot - Anti-KAT2A / GCN5 antibody [EPR21146] - ChIP Grade (ab217876)

All lanes : Anti-KAT2A / GCN5 antibody [EPR21146] - ChIP Grade (ab217876) at 1/1000 dilution

Lane 1 : Wild type HAP1 whole cell lysate

Lane 2 : KAT2A / GCN5-knockout HAP1 whole cell lysate whole cell lysate

Lane 3 : HEK-293T (uman epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

Lane 4 : MCF7 (human breast adenocarcinoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

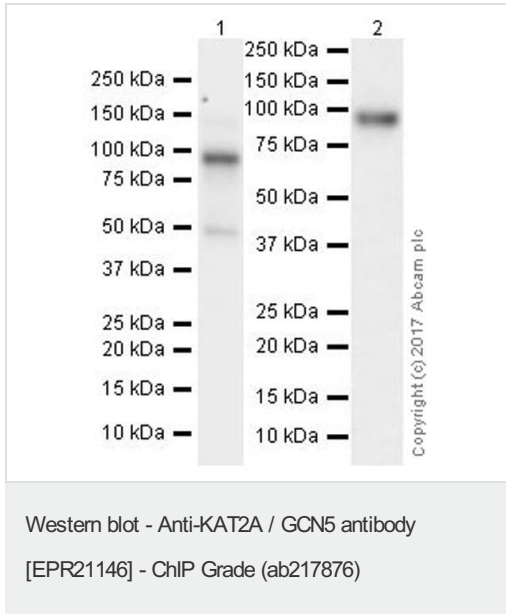
Predicted band size: 94 kDa

Observed band size: 94 kDa

Exposure time: 3 minutes

ab217876 was shown to specifically react with KAT2A / GCN5 in wild-type HAP1 cells as signal was lost in KAT2A / GCN5 knockout cells. Wild-type and KAT2A / GCN5 knockout samples were subjected to SDS-PAGE. Ab217876 and ab181602 (Human anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000

dilution and 1/200000 dilution respectively. Blots were developed with Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated ([ab97051](#)) secondary antibody at 1/100000 dilution for 1 hour at room temperature before imaging. The blot was developed on a BIO-RAD® ChemiDoc™ MP instrument using the ECL technique.



All lanes : Anti-KAT2A / GCN5 antibody [EPR21146] - ChIP Grade ([ab217876](#)) at 1/1000 dilution

Lane 1 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 2 : Human fetal brain tissue lysate

Lysates/proteins at 10 µg per lane.

Secondary

Lane 1 : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Lane 2 : VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) at 1/1000 dilution

Predicted band size: 94 kDa

Observed band size: 94 kDa

Blocking/Dilution buffer: 5% NFDm/TBST

Exposure time: Lane 1: 15 seconds; Lane 2: 3 minutes

The blot was developed on a BIO-RAD® ChemiDoc™ MP instrument.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-KAT2A / GCN5 antibody [EPR21146] - ChIP

Grade (ab217876)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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