

Product datasheet

Anti-KAT2A / GCN5 antibody [EPR21146] - BSA and Azide free ab231075

KO VALIDATED Recombinant RabMAb

4 Images

Overview

Product name	Anti-KAT2A / GCN5 antibody [EPR21146] - BSA and Azide free
Description	Rabbit monoclonal [EPR21146] to KAT2A / GCN5 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: ChIP, WB, IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment within Human KAT2A/ GCN5 aa 50-350. The exact sequence is proprietary. Database link: Q92830
Positive control	WB: HeLa whole cell lysate and human fetal brain tissue lysate
General notes	Ab231075 is the carrier-free version of ab217876 . This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.

Our [carrier-free formats](#) are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.

Use our [conjugation kits](#) for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

ab231075 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm.

Maxpar® is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information [see here](#).

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb® patents](#).

Reproducibility is key to advancing scientific discovery and accelerating scientists' next

breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR21146
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab231075** 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		Use at an assay dependent concentration. Detects a band of approximately 94 kDa (predicted molecular weight: 94 kDa).
IP		Use at an assay dependent concentration.

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.

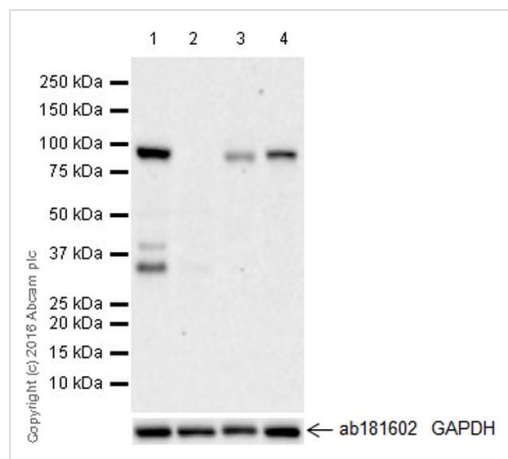
Sequence similarities

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] - BSA and Azide free (ab231075)

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 (human 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.

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

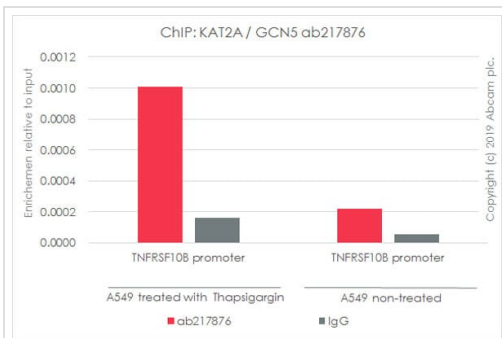
Blocking/Dilution buffer: 5% NFDm/TBST

Exposure time: 3 minutes

[ab217876](#) was shown to specifically react with KAT2A in wild type HAP1 cells. No band was observed when KAT2A knockout samples were used. Wild-type and KAT2A knockout samples were

subjected to SDS-PAGE. [ab217876](#) and [ab181602](#) (Human anti-GAPDH loading control) were incubated overnight at 4°C at a 1/1000 dilution and 1/5000 dilution respectively. Blots were developed with Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated ([ab97051](#)) secondary antibody at 1/100,000 dilution for 1 hour at room temperature before imaging. The blot was developed on a BIO-RAD® ChemiDoc™ MP instrument.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab217876](#)).



ChIP - Anti-KAT2A / GCN5 antibody [EPR21146] - BSA and Azide free ([ab231075](#))

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

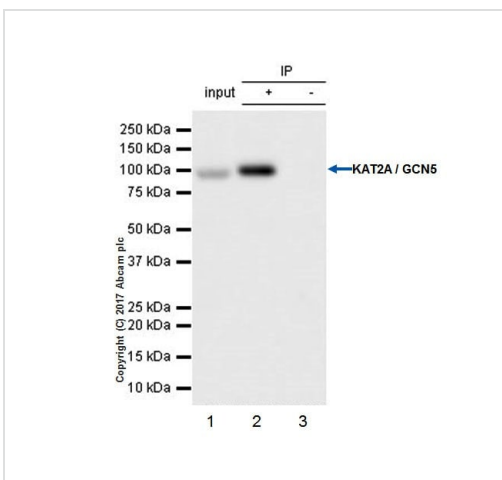
The ChIP was performed with 25 µg of chromatin, 5 µg of [ab217876](#) (red), and 20 µl of Protein A/G sepharose beads. 5 µg of rabbit normal IgG was added to the beads control (gray). The immunoprecipitated DNA was quantified by real time PCR (Sybr green approach).

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

*<http://www.abcam.com/resources?keywords=X%20ChIP%20protocol>

keywords=X%20ChIP%20protocol

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab217876](#)).



Immunoprecipitation - Anti-KAT2A / GCN5 antibody [EPR21146] - BSA and Azide free ([ab231075](#))

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and

sodium azide (ab217876).

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] - BSA and Azide free (ab231075)

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

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