

Product datasheet

Anti-SIRT6 antibody [EPR5079(N)] - BSA and Azide free ab249918

KO VALIDATED Recombinant RabMAB

1 Image

Overview

Product name	Anti-SIRT6 antibody [EPR5079(N)] - BSA and Azide free
Description	Rabbit monoclonal [EPR5079(N)] to SIRT6 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human SIRT6 aa 300 to the C-terminus (Cysteine residue). The exact sequence is proprietary. Database link: Q8N6T7
Positive control	WB: HeLa cell lysate.
General notes	<p>ab249918 is the carrier-free version of ab176345 This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.</p> <p>Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.</p> <p>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.</p> <p>Ab249918 is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm.</p> <p><i>Maxpar[®] is a trademark of Fluidigm Canada Inc.</i></p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p> <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>

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

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	EPR5079(N)
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab249918** 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
WB		Use at an assay dependent concentration. Predicted molecular weight: 39 kDa.

Target

Function

NAD-dependent protein deacetylase. Has deacetylase activity towards histone H3K9Ac and H3K56Ac. Modulates acetylation of histone H3 in telomeric chromatin during the S-phase of the cell cycle. Deacetylates histone H3K9Ac at NF-kappa-B target promoters and may down-regulate the expression of a subset of NF-kappa-B target genes. Acts as a corepressor of the transcription factor HIF1A to control the expression of multiple glycolytic genes to regulate glucose homeostasis. Required for genomic stability. Regulates the production of TNF protein. Has a role in the regulation of life span (By similarity). Deacetylation of nucleosomes interferes with RELA binding to target DNA. May be required for the association of WRN with telomeres during S-phase and for normal telomere maintenance. Required for genomic stability. Required for normal IGF1 serum levels and normal glucose homeostasis. Modulates cellular senescence and apoptosis. On DNA damage, promotes DNA end resection via deacetylation of RBBP8. Has very weak deacetylase activity and can bind NAD(+) in the absence of acetylated substrate.

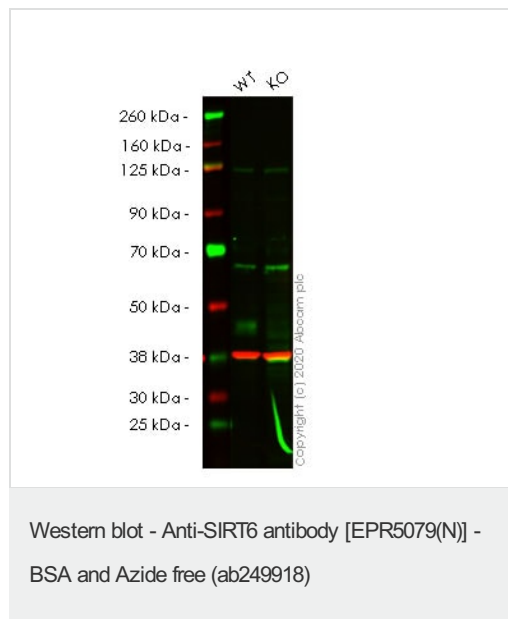
Sequence similarities

Belongs to the sirtuin family. Class IV subfamily.
Contains 1 deacetylase sirtuin-type domain.

Cellular localization

Nucleus, nucleoplasm. Predominantly nuclear. Associated with telomeric heterochromatin regions.

Images



All lanes : Anti-SIRT6 antibody [EPR5079(N)] ([ab176345](#)) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : SIRT6 knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 39 kDa

Observed band size: 45 kDa

[why is the actual band size different from the predicted?](#)

This data was developed using the same antibody clone in a different buffer formulation ([ab176345](#)).

Lanes 1-2: Merged signal (red and green). Green - [ab176345](#) observed at 45 kDa. Red - loading control [ab8245](#) observed at 37 kDa.

[ab176345](#) Anti-SIRT6 antibody [EPR5079(N)] was shown to

specifically react with SIRT6 in wild-type HeLa cells. Loss of signal was observed when knockout cell line [ab265054](#) (knockout cell lysate [ab257673](#)) was used. Wild-type and SIRT6 knockout samples were subjected to SDS-PAGE. [ab176345](#) and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated overnight at 4°C at 1 in 1000 Dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

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

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