# Anti-SIRT6 antibody [EPR18463] ab191385

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](#).

## Overview

<table>
<thead>
<tr>
<th>Product name</th>
<th>Anti-SIRT6 antibody [EPR18463]</th>
</tr>
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<tbody>
<tr>
<td>Description</td>
<td>Rabbit monoclonal [EPR18463] to SIRT6</td>
</tr>
<tr>
<td>Host species</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Tested applications</td>
<td><strong>Suitable for:</strong> ICC/IF, IP, WB</td>
</tr>
<tr>
<td>Species reactivity</td>
<td><strong>Reacts with:</strong> Mouse, Rat, Human</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Synthetic peptide within Human SIRT6 aa 1-100. The exact sequence is proprietary. <a href="#">Database link: Q8N6T7</a></td>
</tr>
<tr>
<td>Positive control</td>
<td>WB: HeLa, Jurkat, NIH/3T3, C6, RAW 264.7 and PC-12 cell lysates; HeLa nuclear lysate; rat brain and spleen lysates. ICC/IF: HeLa and HCT 116 cells. IP: Jurkat whole cell lysate.</td>
</tr>
<tr>
<td>General notes</td>
<td>This product is a recombinant monoclonal antibody, which offers several advantages including:</td>
</tr>
</tbody>
</table>

## Properties

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage buffer</td>
<td>Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA</td>
</tr>
<tr>
<td>Purity</td>
<td>Protein A purified</td>
</tr>
<tr>
<td>Clonality</td>
<td>Monoclonal</td>
</tr>
</tbody>
</table>
Clone number: EPR18463
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab191385 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>ICC/IF</td>
<td>1/1000</td>
<td></td>
</tr>
<tr>
<td>IP</td>
<td>1/40</td>
<td></td>
</tr>
<tr>
<td>WB</td>
<td>1/2000. Detects a band of approximately 42 kDa (predicted molecular weight: 39 kDa).</td>
<td></td>
</tr>
</tbody>
</table>

Target


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


Images
**Western blot - Anti-SIRT6 antibody [EPR18463]**

**All lanes**: Anti-SIRT6 antibody [EPR18463] (ab191385) 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**: 42 kDa

*why is the actual band size different from the predicted?*

**Lanes 1-2**: Merged signal (red and green). Green - ab191385 observed at 40 kDa. Red - loading control ab7291 observed at 50 kDa.

ab191385 Anti-SIRT6 antibody [EPR18463] 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. ab191385 and Anti-alpha Tubulin antibody [DM1A] - Loading Control (ab7291) 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.
Anti-SIRT6 antibody [EPR18463] (ab191385) at 1/10000 dilution + HeLa (Human epithelial cell line from cervix adenocarcinoma) cell lysate at 20 µg

**Secondary**
Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

**Predicted band size:** 39 kDa

**Observed band size:** 42 kDa *why is the actual band size different from the predicted?*

**Exposure time:** 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

The observed MW and doublets are consistent with what has been described in the literature. Two bands run closely together as doublets representing distinct isoforms; see UniProt annotation and PMID 24169447.

Anti-SIRT6 antibody [EPR18463] (ab191385) at 1/10000 dilution + Jurkat (Human T cell leukemia cell line from peripheral blood) cell lysate at 20 µg

**Secondary**
Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

**Predicted band size:** 39 kDa

**Observed band size:** 42 kDa *why is the actual band size different from the predicted?*

**Exposure time:** 30 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

The observed MW and doublets are consistent with what has been described in the literature. Two bands run closely together as doublets representing distinct isoforms; see UniProt annotation and PMID 24169447.
Anti-SIRT6 antibody [EPR18463] (ab191385) at 1/10000 dilution + NIH/3T3 (Mouse embryonic fibroblast cell line) cell lysate at 20 µg

**Secondary**
Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

**Predicted band size:** 39 kDa
**Observed band size:** 39 kDa

**Exposure time:** 30 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

The observed MW and doublets are consistent with what has been described in the literature. Two bands run closely together as doublets representing distinct isoforms; see UniProt annotation and PMID 24169447.

All lanes : Anti-SIRT6 antibody [EPR18463] (ab191385) at 1/5000 dilution

Lane 1 : HeLa (Human epithelial cell line from cervix adenocarcinoma) cytoplasmic lysate
Lane 2 : HeLa (Human epithelial cell line from cervix adenocarcinoma) nuclear lysate

Lysates/proteins at 10 µg per lane.

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

**Predicted band size:** 39 kDa
**Observed band size:** 42 kDa
why is the actual band size different from the predicted?

**Exposure time:** 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

SIRT6 is detected in nuclear fractions.
Western blot - Anti-SIRT6 antibody [EPR18463] (ab191385)

All lanes: Anti-SIRT6 antibody [EPR18463] (ab191385) at 1/2000 dilution

Lane 1: Rat brain lysate
Lane 2: Rat spleen lysate
Lane 3: C6 (Rat glial tumor cell line) cell lysate
Lane 4: RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) cell lysate
Lane 5: PC-12 (Rat adrenal gland pheochromocytoma cell line) cell lysate
Lane 6: NIH/3T3 (Mouse embryonic fibroblast cell line) cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

Predicted band size: 39 kDa
Observed band size: 39 kDa

Exposure time: 30 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.
The observed MW is consistent with what has been described in the literature (PMID 24169447).

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling SIRT6 with ab191385 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing nuclear staining on HeLa cell line. The nuclear counterstain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/1000 dilution (red).

The negative controls are as follows:-
-ve control 1: ab191385 at 1/1000 dilution, followed by Goat Anti-
Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/1000 dilution.

-ve control 2: Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HCT 116 (Human colorectal carcinoma cell line) cells labeling SIRT6 with ab191385 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green).

Confocal image showing nuclear staining on HCT 116 cell line.

The nuclear counterstain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: ab191385 at 1/1000 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/1000 dilution.

-ve control 2: Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.

SIRT6 was immunoprecipitated from 1 mg of Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate with ab191385 at 1/40 dilution.

Western blot was performed from the immunoprecipitate using ab191385 at 1/2000 dilution.

Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG, was used as secondary antibody at 1/1500 dilution.

Lane 1: Jurkat whole cell lysate 10µg (Input).

Lane 2: ab191385 IP in Jurkat whole cell lysate.

Lane 3: Rabbit monoclonal IgG (ab172730) IP instead of ab191385 in Jurkat whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 seconds.

The observed MW and doublets are consistent with what has been described in the literature. Two bands run closely together as
doublets representing distinct isoforms; see UniProt annotation and PMID 24169447.

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