


## Product datasheet

### Anti-ALKBH1 antibody [EPR19215] ab195376

KO VALIDATED Recombinant RabMAb

★★★★★ [1 Abreviews](#) [6 References](#) [7 Images](#)

#### Overview

<b>Product name</b>	Anti-ALKBH1 antibody [EPR19215]
<b>Description</b>	Rabbit monoclonal [EPR19215] to ALKBH1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP <b>Unsuitable for:</b> ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human <b>Predicted to work with:</b> Sheep, Goat, Horse, Guinea pig, Cow, Cat, Dog, Non human primates 
<b>Immunogen</b>	Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Jurkat, K562, A549, A431, C6, RAW 264.7, PC-12 and NIH/3T3 whole cell lysates; human fetal kidney, colon and fetal liver lysates; mouse brain and spleen lysates; rat spleen lysate. IP: K562 whole cell lysate.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified

<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR19215
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab195376 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

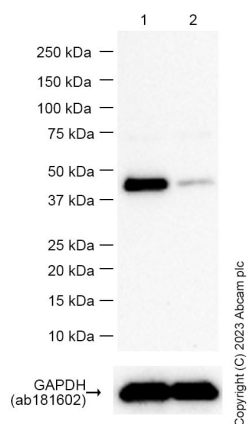
Application	Abreviews	Notes
<b>WB</b>	★★★★★ (1)	1/1000. Detects a band of approximately 44 kDa (predicted molecular weight: 44 kDa). Milk recommended as blocking agent.
<b>IP</b>		1/30.

**Application notes** Is unsuitable for ICC/IF.

## Target

<b>Function</b>	Dioxygenase that repairs alkylated single-stranded DNA and RNA containing 3-methylcytosine by oxidative demethylation. Requires molecular oxygen, alpha-ketoglutarate and iron. May have a role in placental trophoblast lineage differentiation (By similarity). Has DNA lyase activity and introduces double-stranded breaks at abasic sites. Cleaves both single-stranded DNA and double-stranded DNA at abasic sites, with the greatest activity towards double-stranded DNA with two abasic sites. DNA lyase activity does not require alpha-ketoglutarate and iron.
<b>Tissue specificity</b>	Ubiquitous.
<b>Sequence similarities</b>	Belongs to the alkB family. Contains 1 Fe2OG dioxygenase domain.
<b>Cellular localization</b>	Mitochondrion. Nucleus. Mainly localizes in euchromatin, largely excluded from heterochromatin and nucleoli.

## Images



Western blot - Anti-ALKBH1 antibody [EPR19215] (ab195376)

**All lanes :** Anti-ALKBH1 antibody [EPR19215] (ab195376) at 1/1000 dilution

**Lane 1 :** A549 (Human lung carcinoma epithelial cell) transfected with scrambled siRNA control whole cell lysate

**Lane 2 :** A549 (Human lung carcinoma epithelial cell) transfected with siRNA specifically targeting ALKBH1 whole cell lysate

Lysates/proteins at 20 µg per lane.

## Secondary

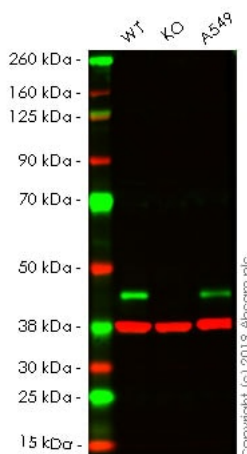
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

**Predicted band size:** 44 kDa

**Observed band size:** 44 kDa

**Exposure time:** 120 seconds

Blocking and diluting buffer: 5% NFDM/TBST



Western blot - Anti-ALKBH1 antibody [EPR19215] (ab195376)

**All lanes :** Anti-ALKBH1 antibody [EPR19215] (ab195376) at 1/1000 dilution

**Lane 1 :** Wild-type HAP1 whole cell lysate

**Lane 2 :** ALKBH1 knockout HAP1 whole cell lysate

**Lane 3 :** A549 whole cell lysate

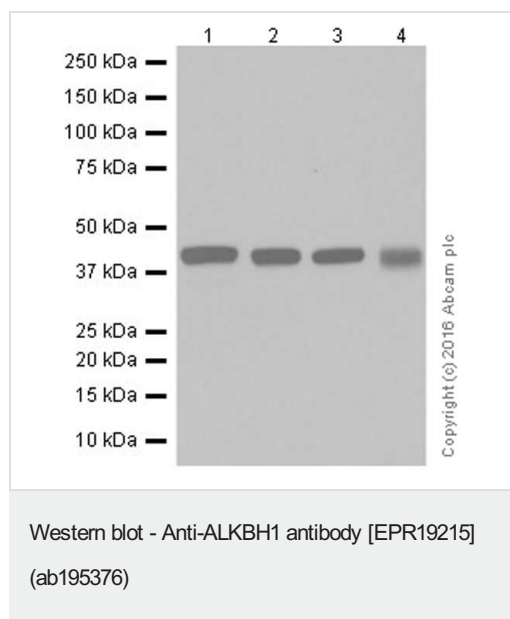
Lysates/proteins at 20 µg per lane.

**Predicted band size:** 44 kDa

**Lanes 1 - 3:** Merged signal (red and green). Green - ab195376 observed at 43 kDa. Red - loading control, [ab8245](#), observed at 37 kDa.

ab195376 was shown to specifically react with in wild-type HAP1 cells as signal was lost in ALKBH1 knockout cells. Wild-type and ALKBH1 knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% Milk. Ab195376 and [ab8245](#) (Mouse anti-GAPDH loading control) were incubated overnight at

4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed [ab216773](#) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed [ab216776](#) secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



**All lanes :** Anti-ALKBH1 antibody [EPR19215] (ab195376) at 1/1000 dilution

**Lane 1 :** Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate

**Lane 2 :** K562 (Human chronic myelogenous leukemia cell line from bone marrow) whole cell lysate

**Lane 3 :** A549 (Human lung carcinoma cell line) whole cell lysate

**Lane 4 :** A431 (Human epidermoid carcinoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

### Secondary

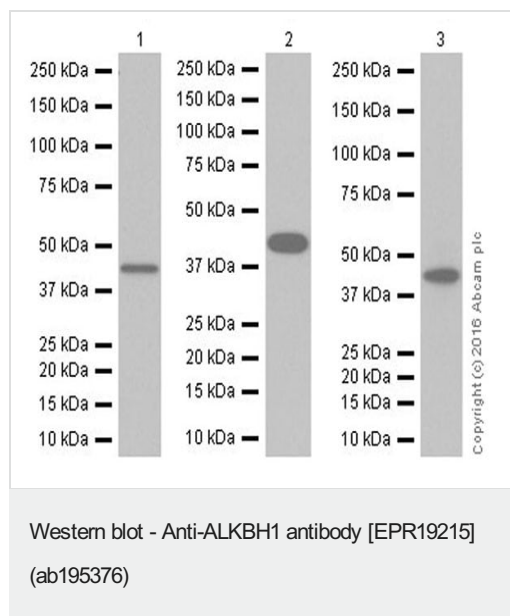
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

**Predicted band size:** 44 kDa

**Observed band size:** 44 kDa

**Exposure time:** 30 seconds

Blocking/Dilution buffer: 5% NFDm/TBST.



**All lanes :** Anti-ALKBH1 antibody [EPR19215] (ab195376) at 1/1000 dilution

**Lane 1 :** Human fetal kidney lysate

**Lane 2 :** Human colon lysate

**Lane 3 :** Human fetal liver lysate

Lysates/proteins at 10 µg per lane.

### Secondary

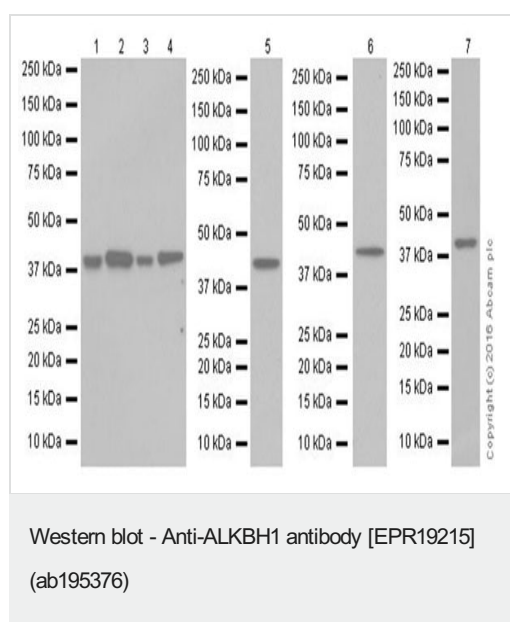
**All lanes :** Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

**Predicted band size:** 44 kDa

**Observed band size:** 44 kDa

**Exposure time:** 3 minutes

Blocking/Dilution buffer: 5% NFDm/TBST.



**All lanes :** Anti-ALKBH1 antibody [EPR19215] (ab195376) at 1/1000 dilution

**Lane 1 :** C6 (Rat glial tumor cell line) whole cell lysate

**Lane 2 :** RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate

**Lane 3 :** PC-12 (Rat adrenal gland pheochromocytoma cell line) whole cell lysate

**Lane 4 :** NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell lysate

**Lane 5 :** Mouse brain lysate

**Lane 6 :** Mouse spleen lysate

**Lane 7 :** Rat spleen lysate

Lysates/proteins at 10 µg per lane.

### Secondary

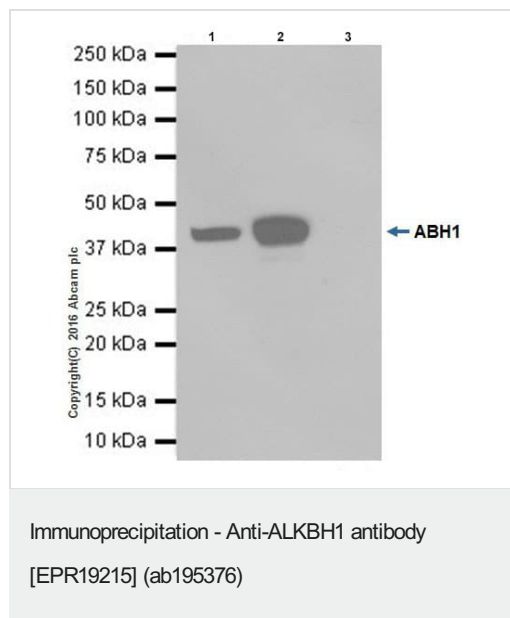
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

**Predicted band size:** 44 kDa

**Observed band size:** 44 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1-4: 30 seconds Lane 5-7: 3 minutes.



ALKBH1 was immunoprecipitated from 1mg of K562 (Human chronic myelogenous leukemia cell line from bone marrow) whole cell lysate with ab195376 at 1/30 dilution.

Western blot was performed from the immunoprecipitate using ab195376 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10000 dilution.

Lane 1: K562 whole cell lysate 10µg (Input).

Lane 2: ab195376 IP in K562 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab195376 in K562 whole cell lysate.

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

Exposure time: 10 seconds.

Why choose a recombinant antibody?

<p><b>Research with confidence</b> Consistent and reproducible results</p>	<p><b>Long-term and scalable supply</b> Recombinant technology</p>
<p><b>Success from the first experiment</b> Confirmed specificity</p>	<p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-ALKBH1 antibody [EPR19215] (ab195376)

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

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