

Product datasheet

Anti-ALKBH1 antibody [EPR6176] ab126596

Recombinant **RabMAb**

★★★★☆ 1 Abreviews 1 References 7 Images

Overview

Product name	Anti-ALKBH1 antibody [EPR6176]
Description	Rabbit monoclonal [EPR6176] to ALKBH1
Host species	Rabbit
Tested applications	Suitable for: WB, IP, IHC-P Unsuitable for: ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide (the amino acid sequence is considered to be commercially sensitive) within Human ALKBH1 aa 350 to the C-terminus. The exact sequence is proprietary.
Positive control	WB: Jurkat, K562 and A549 cell lysates. IHC-P: Human kidney and liver tissues. IP: Jurkat and K562 cell lysates.
General notes	Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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

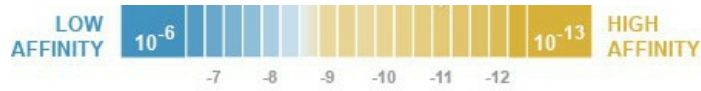
We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you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

This product is a [recombinant rabbit monoclonal antibody](#).

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. Stable for 12 months at -20°C.
Dissociation constant (K_D)	K _D = 2.80 x 10 ⁻¹¹ M





[Learn more about K_D](#)

Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR6176
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab126596** 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	★★★★☆	1/1000 - 1/10000. Detects a band of approximately 43 kDa (predicted molecular weight: 43 kDa).
IP		1/10 - 1/100.
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols .

Application notes Is unsuitable for ICC/IF.

Target

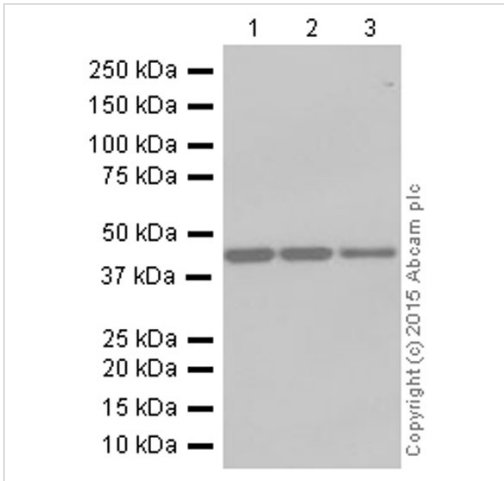
Function Dioxygenase that repairs alkylated single-stranded DNA and RNA containing 3-methylcytosine by oxidative demethylation. Requires molecular oxygen, alpha-ketoglutarate and iron. May have a role in placental trophoblast lineage differentiation (By similarity). Has DNA lyase activity and introduces 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.

Tissue specificity Ubiquitous.

Sequence similarities Belongs to the alkB family.
Contains 1 Fe2OG dioxygenase domain.

Cellular localization Mitochondrion. Nucleus. Mainly localizes in euchromatin, largely excluded from heterochromatin and nucleoli.

Images



Western blot - Anti-ALKBH1 antibody [EPR6176] (ab126596)

All lanes : Anti-ALKBH1 antibody [EPR6176] (ab126596) at 1/10000 dilution (purified)

Lane 1 : Jurkat whole cell lysate

Lane 2 : K562 whole cell lysate

Lane 3 : A549 whole cell lysate

Lysates/proteins at 20 µg per lane.

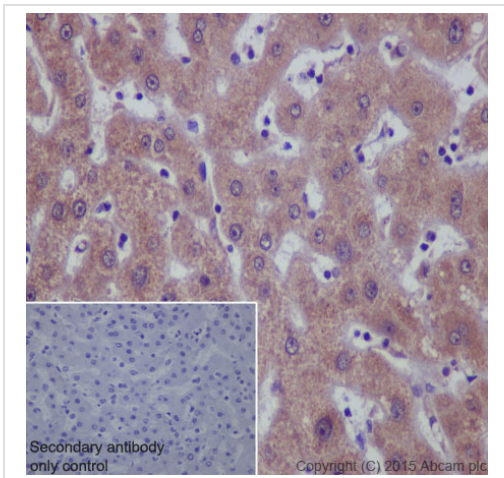
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 43 kDa

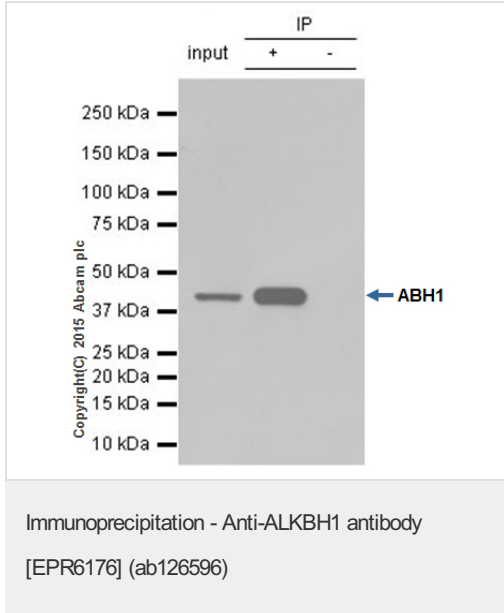
Observed band size: 43 kDa

Blocking and dilution buffer: 5% NFDm/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ALKBH1 antibody [EPR6176] (ab126596)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue labelling ALKBH1 with purified ab126596 at a dilution of 1/50. Heat mediated antigen retrieval was performed using EDTA buffer pH 9. ab97051, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



ab126596 (purified) at a dilution of 1/30
immunoprecipitating ALKBH1 in Jurkat whole cell lysate.

Lane 1 (input): Jurkat whole cell lysate (10µg)

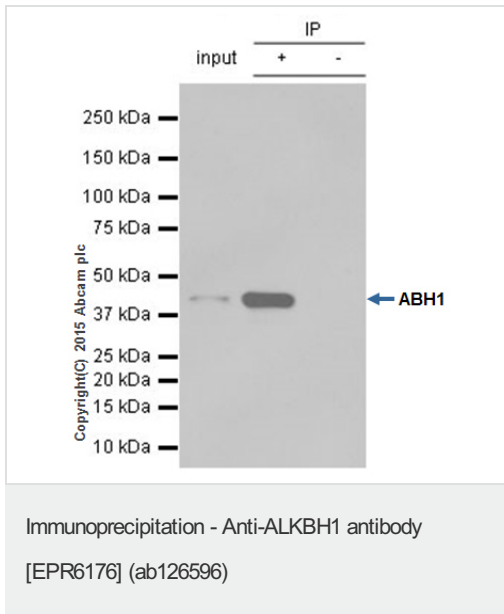
Lane 2 (+): ab126596 + Jurkat whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG ([ab172730](#)) instead of ab126596
in Jurkat whole cell lysate.

For western blotting, VeriBlot for IP Detection Reagent (HRP)
([ab131366](#)), was used for detection at 1/1000 dilution.

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



ab126596 (purified) at a dilution of 1/30
immunoprecipitating ALKBH1 in K562 whole cell lysate.

Lane 1 (input): K562 whole cell lysate (10µg)

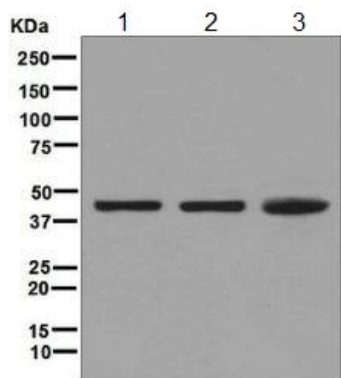
Lane 2 (+): ab126596 + K562 whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG ([ab172730](#)) instead of ab126596
in K562 whole cell lysate.

For western blotting, VeriBlot for IP Detection Reagent (HRP)
([ab131366](#)), was used for detection at 1/1000 dilution.

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



Western blot - Anti-ALKBH1 antibody [EPR6176] (ab126596)

All lanes : Anti-ALKBH1 antibody [EPR6176] (ab126596) at 1/1000 dilution (unpurified)

Lane 1 : Jurkat cell lysate

Lane 2 : K562 cell lysate

Lane 3 : A549 cell lysate

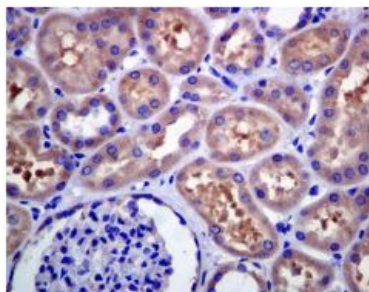
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP-conjugated goat anti-rabbit IgG at 1/2000 dilution

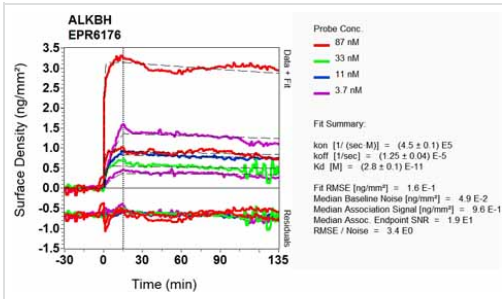
Predicted band size: 43 kDa

Observed band size: 43 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ALKBH1 antibody [EPR6176] (ab126596)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue labelling ALKBH1 with unpurified ab126596 at a dilution of 1/50.



Other - Anti-ALKBH1 antibody [EPR6176]
(ab126596)

Equilibrium dissociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

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