

### Anti-LOX antibody [EPR4025] ab174316

KO 評価済 リコンビナント RabMAb

★★★★☆ 3 Abreviews 37 References 画像数 9

#### 製品の概要

製品名	Anti-LOX antibody [EPR4025]
製品の詳細	Rabbit monoclonal [EPR4025] to LOX
由来種	Rabbit
アプリケーション	適用あり: WB, IHC-P, ICC/IF, IP, Flow Cyt (Intra)
種交差性	交差種: Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	HeLa, (HeLa (Human cervix adenocarcinoma epithelial cell) treated with 0.5 mM DFO for 24 hours whole cell lysates ) Jurkat and WI-38 cell lysates. Human muscle tissue. HeLa cells. Immunoprecipitation pellet from WI-38 cells lysate. Immunocytochemistry: Human chondrocytes
特記事項	<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>

#### 製品の特性

製品の状態	Liquid
保存方法	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.
バッファー	Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 59% PBS, 0.05% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR4025
アイソタイプ	IgG

## アプリケーション

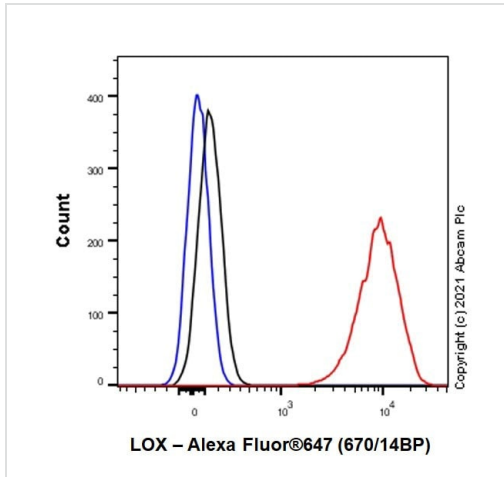
**The Abpromise guarantee** **Abpromise保証は、次のテスト済みアプリケーションにおけるab174316の使用に適用されます**  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	★★★★☆ (1)	1/1000 - 1/10000. Predicted molecular weight: 47 kDa. <b>For unpurified, use 1/1000 - 1/2000.</b>
IHC-P		1/900. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. <b>For unpurified, use 1/300.</b> <b><u>IHC antigen retrieval protocols.</u></b>
ICC/IF	★★★★★ (1)	1/300. <b>For unpurified, use 1/100.</b>
IP		1/10 - 1/100.
Flow Cyt (Intra)		1/100. For unpurified, use 1/30. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

## ターゲット情報

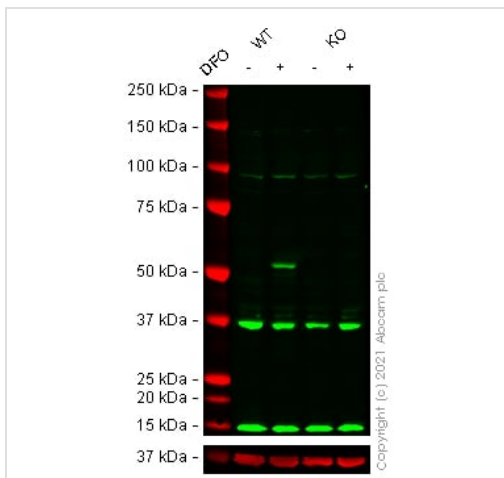
機能	Responsible for the post-translational oxidative deamination of peptidyl lysine residues in precursors to fibrous collagen and elastin. In addition to cross-linking of extracellular matrix proteins, may have a direct role in tumor suppression.
組織特異性	Heart, placenta, skeletal muscle, kidney, lung and pancreas.
関連疾患	Defects in LOX may be a cause of cutis laxa autosomal recessive type 1 (ARCL1) [MIM:219100].
配列類似性	Belongs to the lysyl oxidase family.
翻訳後修飾	The lysine tyrosylquinone cross-link (LTQ) is generated by condensation of the epsilon-amino group of a lysine with a topaquinone produced by oxidation of tyrosine.
細胞内局在	Secreted > extracellular space.

## 画像



Flow Cytometry (Intracellular) - Anti-LOX antibody [EPR4025] (ab174316)

Flow Cytometry (Intracellular) analysis of ab174316. HeLa (Human cervix adenocarcinoma epithelial cell) cells were fixed in 4% paraformaldehyde and permeabilized with 90% methanol. ab174316 was used at 1:100 dilution (1ug) (Red). Secondary antibody Goat anti rabbit IgG (Alexa Fluor® 647, **ab150083**) at 1:5000 dilution. Isotype control Rabbit monoclonal IgG (**ab172730**) (Black). Unlabelled control, cells without incubation with primary antibody and secondary antibody (Blue).



Western blot - Anti-LOX antibody [EPR4025] (ab174316)

**All lanes** : Anti-LOX antibody [EPR4025] (ab174316) at 1/1000 dilution

**Lane 1** : Wild-type HeLa Vehicle Control DFO (0 mM, 24 h) cell lysate

**Lane 2** : Wild-type HeLa Treated DFO (0.5 mM, 24 h) cell lysate

**Lane 3** : LOX knockout HeLa Vehicle Control DFO (0 mM, 24 h) cell lysate

**Lane 4** : LOX knockout HeLa Treated DFO (0.5 mM, 24 h) cell lysate

Lysates/proteins at 20 µg per lane.

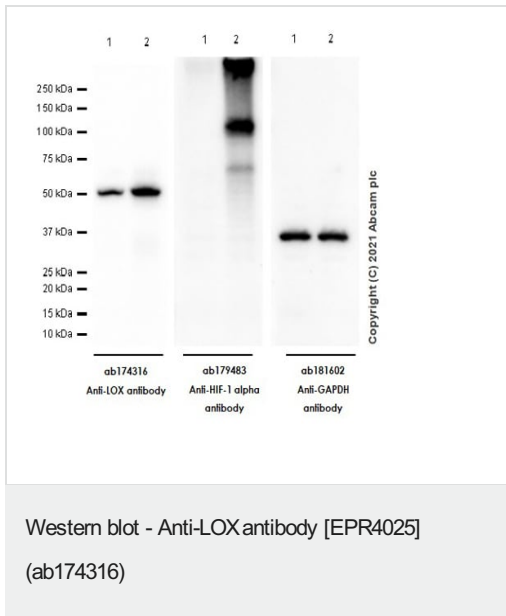
Performed under reducing conditions.

**Predicted band size:** 47 kDa

**Observed band size:** 52 kDa

False colour image of Western blot: Anti-LOX antibody [EPR4025] staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH

antibody [6C5] ([ab8245](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab174316 was shown to bind specifically to LOX. A band was observed at 52 kDa in wild-type HeLa cell lysates with no signal observed at this size in Lox knockout cell line [ab261801](#) (knockout cell lysate [ab256981](#)). To generate this image, wild-type and Lox knockout HeLa cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3% milk in TBS-0.1 % Tween<sup>®</sup> 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye<sup>®</sup> 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.



#### All lanes :

**Lane 1 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

**Lane 2 :** HeLa (Human cervix adenocarcinoma epithelial cell) treated with 0.5 mM DFO for 24 hours whole cell lysates

Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/10000 dilution

**Predicted band size:** 47 kDa

**Observed band size:** 50 kDa

**Exposure time:** 7 seconds

#### Primary antibody dilution:

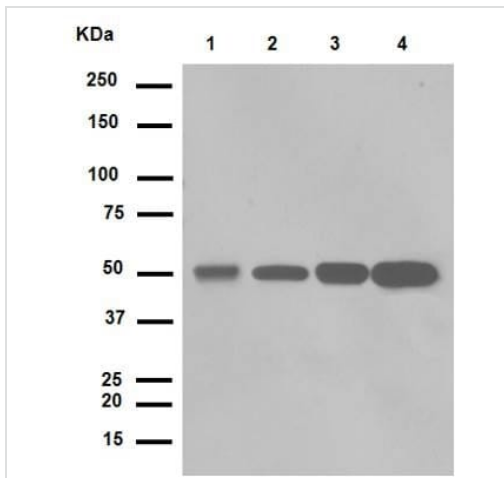
ab174316 Anti-LOX antibody 1:5000 dilution (0.1mg/ml)

[ab179483](#) Anti-HIF-1 alpha antibody 1:500 dilution (0.3mg/ml)

#### Blocking buffer / Dilution buffer and concentration:

5% NFD/MTBST

LOX and HIF-1 alpha could be induced under hypoxia condition (PMID: 23545606, PMID: 30226558).



Western blot - Anti-LOX antibody [EPR4025] (ab174316)

**All lanes** : Anti-LOX antibody [EPR4025] (ab174316) at 1/3700 dilution (purified)

**Lane 1** : WI-38 cell lysate

**Lane 2** : Jurkat cell lysate

**Lane 3** : Mouse brain

**Lane 4** : Rat brain

Lysates/proteins at 20 µg per lane.

### Secondary

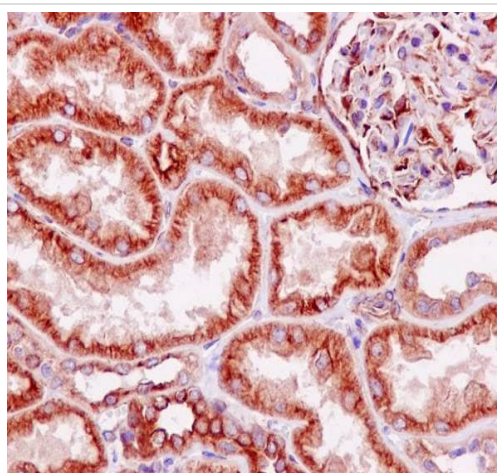
**All lanes** : HRP goat anti-rabbit (H+L) at 1/1000 dilution

**Predicted band size:** 47 kDa

**Observed band size:** 50 kDa

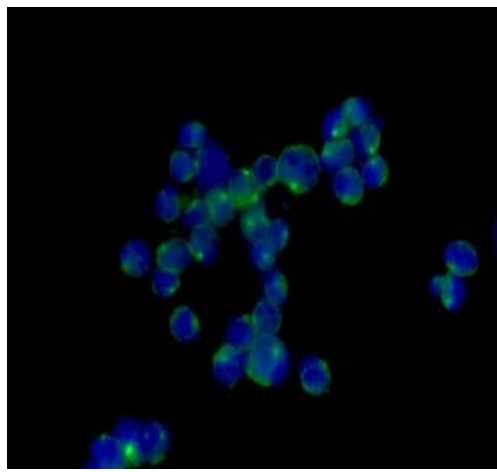
Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



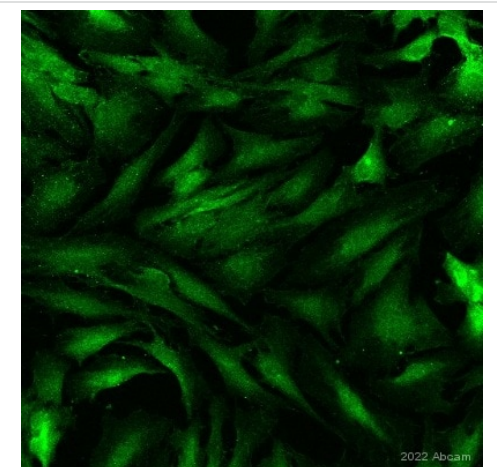
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LOX antibody [EPR4025] (ab174316)

Immunohistochemical staining of paraffin embedded human kidney with purified ab174316 at a working dilution of 1 in 900. The secondary antibody used is a HRP polymer for rabbit IgG. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0.



Immunocytochemistry/ Immunofluorescence - Anti-LOX antibody [EPR4025] (ab174316)

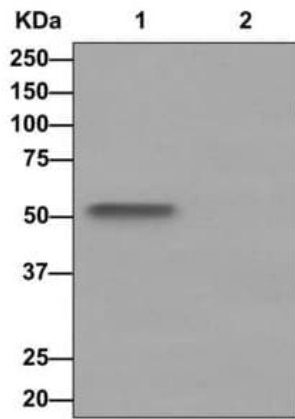
Immunofluorescence staining of Jurkat cells with purified ab174316 at a working dilution of 1 in 300, counter-stained with DAPI. The secondary antibody was Alexa Fluor® 488 goat anti rabbit, used at a dilution of 1 in 200. The cells were fixed in 4% PFA.



Immunocytochemistry/ Immunofluorescence - Anti-LOX antibody [EPR4025] (ab174316)

This image is courtesy of an anonymous Abreview

Immunocytochemistry/ Immunofluorescence analysis of formaldehyde-fixed Triton X-100 permeabilized human chondrocytes staining with ab174316 at 1/100 dilution in PBS with 0.1% triton x100. Secondary antibody was Alexa Fluor® 488 Goat Anti-Rabbit at 1/2000 dilution. Samples were incubated with the primary antibody for 30 minutes at 37°C. Blocking was with 0.1% BSA for 30 minutes at 37°C (ref: PMC7204390)



Western blot analysis on immunoprecipitation pellet from (Lane 1) WI-38 (Human fetal lung fibroblast cell line) cells lysate or (Lane 2) 1X PBS (negative control) using unpurified ab174316 at a 1/10 dilution and HRP-conjugated anti-rabbit IgG preferentially detecting the non-reduced form of rabbit IgG.

Immunoprecipitation - Anti-LOX antibody [EPR4025] (ab174316)

### 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-LOX antibody [EPR4025] (ab174316)

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

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.co.jp/abpromise> or contact our technical team.

## Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors