


Anti-LOX antibody ab31238

★★★★☆ [16 Abreviews](#) [72 References](#) [2 Images](#)

Overview

| | |
|----------------------------|---|
| Product name | Anti-LOX antibody |
| Description | Rabbit polyclonal to LOX |
| Host species | Rabbit |
| Tested applications | Suitable for: WB |
| Species reactivity | Reacts with: Mouse, Human Predicted to work with: Rat, Chicken, Dog  |
| Immunogen | Synthetic peptide corresponding to Human LOX aa 400 to the C-terminus (C terminal). (Peptide available as ab28612) |
| General notes | <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>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, along with publications, customer reviews and Q&As</p> |

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 or -80°C. Avoid freeze / thaw cycle. |
| Storage buffer | Preservative: 0.02% Sodium azide Constituent: PBS |
| | Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help. |
| Purity | Immunogen affinity purified |
| Clonality | Polyclonal |
| Isotype | IgG |

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab31238 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 | ★★★★★ (6) | Use a concentration of 1 - 5 µg/ml. Detects a band of approximately 36 kDa (predicted molecular weight: 32 kDa). Can be blocked with Human LOX peptide (ab28612) . Abcam recommends using Milk as the blocking agent. |

Target

Function

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.

Tissue specificity

Heart, placenta, skeletal muscle, kidney, lung and pancreas.

Involvement in disease

Defects in LOX may be a cause of cutis laxa autosomal recessive type 1 (ARCL1) [MIM:219100].

Sequence similarities

Belongs to the lysyl oxidase family.

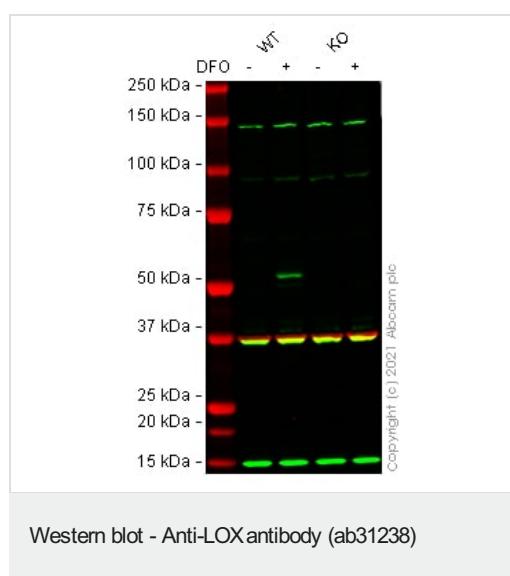
Post-translational modifications

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.

Cellular localization

Secreted > extracellular space.

Images



All lanes : Anti-LOX antibody (ab31238) at 1 µg/ml

Lane 1 : Wild-type HeLa 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

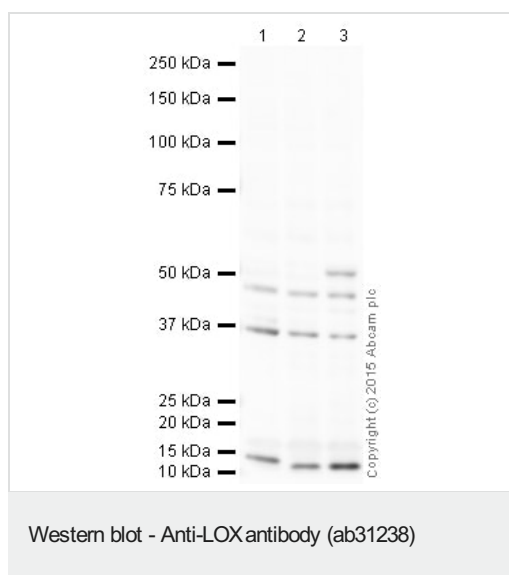
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 32 kDa

Observed band size: 50 kDa

False colour image of Western blot: Anti-LOX antibody staining at 1 ug/ml, shown in green; Mouse anti-GAPDH antibody [6C5] ([ab8245](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, [ab31238](#) was shown to bind specifically to LOX. A band was observed at 50 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® 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® 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.



All lanes : Anti-LOX antibody ([ab31238](#)) at 1 µg/ml

Lane 1 : MDA-MB-361 (Human breast adenocarcinoma cell line)
Whole Cell Lysate

Lane 2 : MEF1 (Mouse embryonic fibroblast cell line) Whole Cell
Lysate

Lane 3 : NIH 3T3 (Mouse) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 32 kDa

Additional bands at: 15 kDa, 36 kDa (possible mature (processed) protein), 47 kDa (possible immature (unprocessed)), 52 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 4 minutes

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab31238 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution **ab133406**.

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

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