abcam

Product datasheet

Anti-iNOS antibody ab15323

★★★★☆ **20 Abreviews**   **526 References**   5 Images

Overview

Product name	Anti-iNOS antibody
Description	Rabbit polyclonal to iNOS
Host species	Rabbit
Specificity	The immunogen used to raise this antibody shares 84% homology with Rat iNOS. Ab15323 has been batch tested using mouse lysates/tissues only. Some customers have successfully used ab15323 with rat. Please contact Abcam Scientific Support for more information.
Tested applications	**Suitable for:** IHC-P, WB
Species reactivity	**Reacts with:** Mouse, Recombinant fragment
	Predicted to work with: Rat, Human
Immunogen	Synthetic peptide corresponding to Mouse iNOS.
Positive control	IHC-P: FFPE mouse and rat lung tissue sections.
General notes	**This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.**
	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.
	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

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. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.4 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
Purity	Immunogen affinity purified

| Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab15323 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
IHC-P	★★★★☆ **(10)**	1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB	★★★★☆ **(3)**	Use at an assay dependent concentration. Detects a band of approximately 140 kDa (predicted molecular weight: 131 kDa). Please use at a assay dependent concentration. 1µg/ml was used of a 0.2mg/ml stock (lot GR126616-1). Otherwise 1/250 is recommended for any batches at lower concentration.

Target

Function	Produces nitric oxide (NO) which is a messenger molecule with diverse functions throughout the body. In macrophages, NO mediates tumoricidal and bactericidal actions. Also has nitrosylase activity and mediates cysteine S-nitrosylation of cytoplasmic target proteins such COX2.
Tissue specificity	Expressed in the liver, retina, bone cells and airway epithelial cells of the lung. Not expressed in the platelets.
Sequence similarities	Belongs to the NOS family. Contains 1 FAD-binding FR-type domain. Contains 1 flavodoxin-like domain.

Images

Western blot - Anti-iNOS antibody (ab15323)
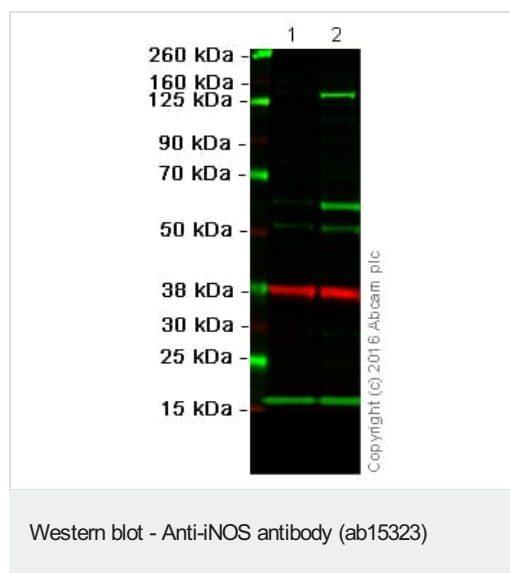
All lanes : Anti-iNOS antibody (ab15323) at 1 µg/ml

Lane 1 : Raw264.7

Lane 2 : Raw264.7 + LPS (1 ug per mL; 18 hours)
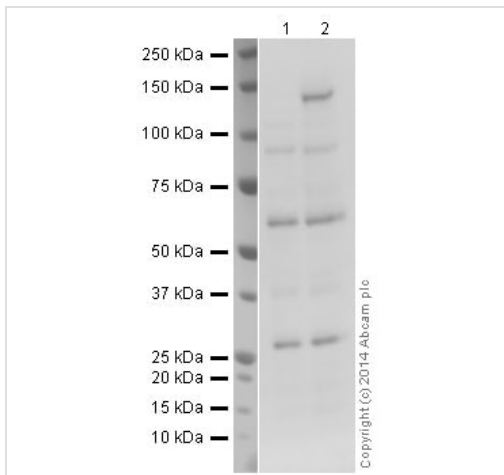
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : IR- goat anti-rabbit (green) at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 131 kDa

This blot was produced using a 4-12% Bis-Tris gel under the MOPS buffer system under denaturing, reducing conditions. The gel was run at 200V for 60 minutes before being transferred onto a nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour before being incubated with rabbit polyclonal to iNOS (ab15323; 1 ug x mL-1 (based on antibody concentration of 0.2mg/ml - lot GR126616-1) and the loading control mouse anti-GAPDH antibody (**ab8245**; 1:10000) overnight at 4°C. Antibody binding was detected using infrared (IR) labelled goat anti-rabbit (green; 1:10000) and IR-goat anti-mouse (red; 1:10000) for 1 hour at room temperature before imaging.

Western blot - Anti-iNOS antibody (ab15323)

All lanes : Anti-iNOS antibody (ab15323) at 5 µg/ml

Lane 1 : Raw 264.7 whole cell lysate + PMA
Lane 2 : Raw 264.7 whole cell lysate + PMA + LPS + Brefeldin A
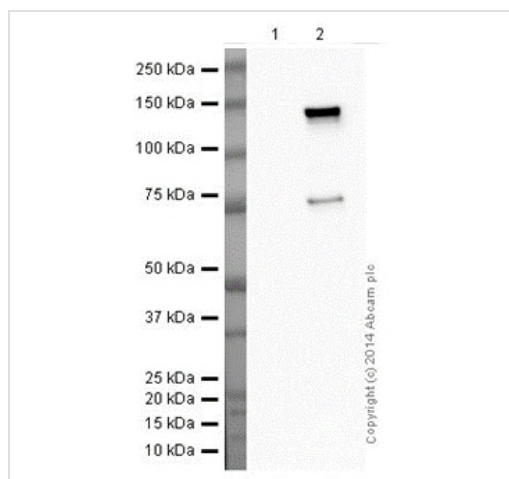
Lysates/proteins at 20 µg per lane.

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 131 kDa
Additional bands at: 140 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 8 minutes

Western blot - Anti-iNOS antibody (ab15323)

All lanes : Anti-iNOS antibody (ab15323) at 5 μg/ml

Lane 1 : Human recombinant iNOS protein
Lane 2 : Mouse recombinant iNOS protein

Lysates/proteins at 0.1 μg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution
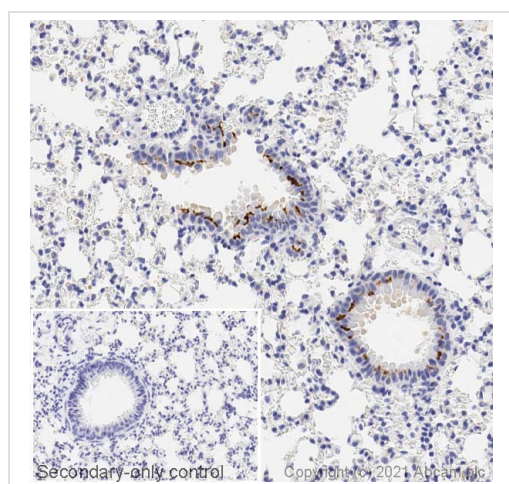
Developed using the ECL technique.

Performed under reducing conditions.

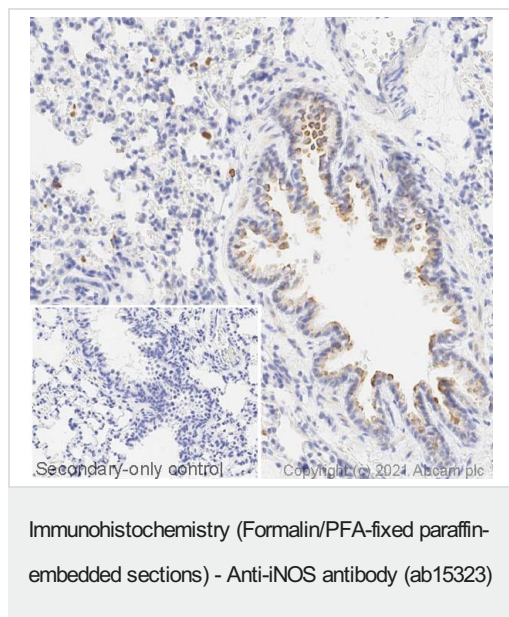**Predicted band size:** 131 kDa

Exposure time: 1 minute

Membrane was blocked in 2% milk for 1 hour at RT. Primary anitbody was incubated at 4°C overnight.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-iNOS antibody (ab15323)

IHC image of iNOS staining in a section of formalin-fixed paraffin-embedded normal mouse lung performed on a Leica BOND™ system using the standard protocol **F**. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab15323, 1/100 dilution, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-iNOS antibody (ab15323)

IHC image of iNOS staining in a section of formalin-fixed paraffin-embedded normal rat lung performed on a Leica BOND™ system using the standard protocol **F**. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab15323, 1/100 dilution, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

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

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