




## Product datasheet

# Anti-Heme Oxygenase 1 antibody [HO-1-1] ab13248

★★★★★ [19 Abreviews](#) [298 References](#) [7 Images](#)

### Overview

<b>Product name</b>	Anti-Heme Oxygenase 1 antibody [HO-1-1]
<b>Description</b>	Mouse monoclonal [HO-1-1] to Heme Oxygenase 1
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> WB, Flow Cyt (Intra), Sandwich ELISA, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Cow, Dog, Human <b>Predicted to work with:</b> Pig 
<b>Immunogen</b>	Synthetic peptide: MERPQPDSMPQDLSEALKEATKEVHTQAEN , corresponding to amino acids 1-30 of Human Heme Oxygenase 1.  <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a>
<b>Positive control</b>	Recombinant Human or Rat HO-1 (Hsp32) Protein. HEK293 treated with 30 uM hemin for 18hrs (see Abreview). IHC-P: FFPE human spleen normal.
<b>General notes</b>	<p>This product was changed from ascites to tissue culture supernatant on 22<sup>nd</sup> May 2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.</p> <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&amp;As</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: 0.09% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine)
<b>Purity</b>	Tissue culture supernatant

<b>Purification notes</b>	Purified from TCS.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	HO-1-1
<b>Isotype</b>	IgG1

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab13248 in the following tested applications.

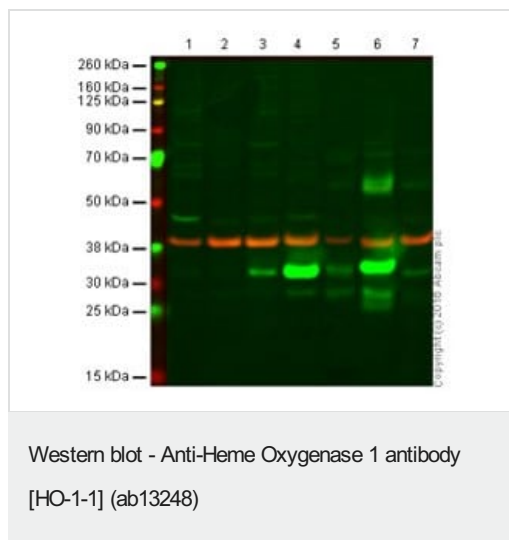
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
<b>WB</b>	★★★★★ (15)	Use a concentration of 4 µg/ml. Detects a band of approximately 32 kDa (predicted molecular weight: 34.6 kDa).
<b>Flow Cyt (Intra)</b>		Use at an assay dependent concentration. <b>ab170190</b> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
<b>Sandwich ELISA</b>		Use at an assay dependent concentration. Can be paired for Sandwich ELISA with <b>Rabbit polyclonal to Heme Oxygenase 1 (ab13243)</b> . For sandwich ELISA, use this antibody as Capture at 5 µg/ml with Rabbit polyclonal to Heme Oxygenase 1 ( <b>ab13243</b> ) as Detection.
<b>IHC-P</b>	★★★★★ (1)	Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

## Target

<b>Function</b>	Heme oxygenase cleaves the heme ring at the alpha methene bridge to form biliverdin. Biliverdin is subsequently converted to bilirubin by biliverdin reductase. Under physiological conditions, the activity of heme oxygenase is highest in the spleen, where senescent erythrocytes are sequestered and destroyed.
<b>Sequence similarities</b>	Belongs to the heme oxygenase family.
<b>Cellular localization</b>	Microsome. Endoplasmic reticulum.

## Images



**All lanes** : Anti-Heme Oxygenase 1 antibody [HO-1-1] (ab13248)  
at 1 µg/ml

**Lane 1** : Hek293

**Lane 2** : HL60

**Lane 3** : HeLa

**Lane 4** : A549

**Lane 5** : Hu spleen

**Lane 6** : Ms spleen

**Lane 7** : Rt spleen

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes** : IRDye® 800CW Goat anti Mouse

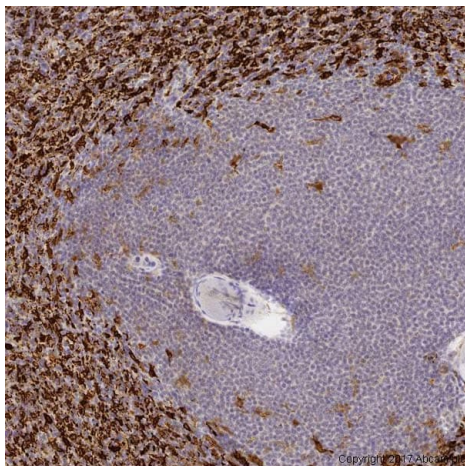
**Predicted band size:** 34.6 kDa

**Observed band size:** 32 kDa

Hek293 & HL60 presumed negative or very low expression.

Loading control GAPDH at 38kDa

This image was generated using the ascites version of the product.



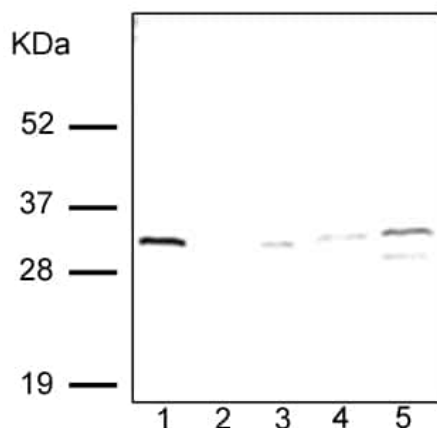
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Heme Oxygenase 1 antibody [HO-1-1] (ab13248)

IHC image of Hem Oxygenase 1 staining in a section of formalin fixed, paraffin embedded normal human spleen tissue section\*, 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 20 mins. The section was then incubated with ab13248, 5µg/ml, 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.

This image was generated using the ascites version of the product.

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.

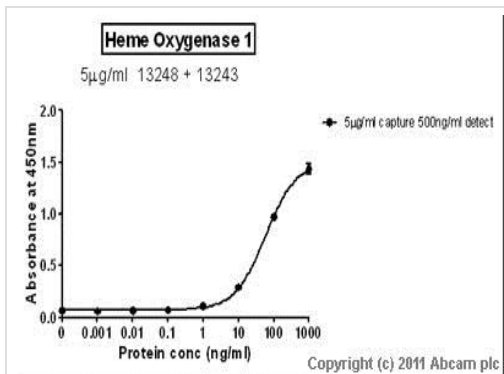
\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



Western blot - Anti-Heme Oxygenase 1 antibody [HO-1-1] (ab13248)

The following proteins and lysates were electrophoresed; Lane 1 - Heme-Oxygenase-1 (Hsp32) Protein (50ng), lane 2 - Heme-Oxygenase-2 protein NSP-550 (100ng), lane 3 - MDBK Cell Lysate (20ug), lane 4 - Mouse liver microsome (20ug) and lane 5 - Dog liver microsome (20ug). ab13248 was applied at a concentration of 4ug/ml-1.

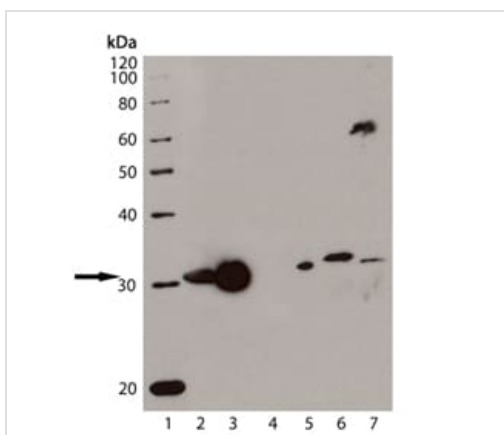
This image was generated using the ascites version of the product.



Sandwich ELISA - Anti-Heme Oxygenase 1 antibody  
[HO-1-1] (ab13248)

Standard Curve for Heme Oxygenase 1 (Analyte: **Heme Oxygenase 1 protein (Tagged) (ab85243)**); dilution range 1pg/ml to 1µg/ml using Capture Antibody **Mouse monoclonal [HO-1-1] to Heme Oxygenase 1 (ab13248)** at 5µg/ml and Detector Antibody **Rabbit polyclonal to Heme Oxygenase 1 (ab13243)** at 0.5µg/ml.

This image was generated using the ascites version of the product.



Western blot - Anti-Heme Oxygenase 1 antibody  
[HO-1-1] (ab13248)

**Lane 1** : MW marker

**Lanes 2-7** : Anti-Heme Oxygenase 1 antibody [HO-1-1] (ab13248)

**Lane 2** : Recombinant Rat Heme Oxygenase 1

**Lane 3** : Recombinant Human Heme Oxygenase 1

**Lane 4** : Recombinant Human Heme Oxygenase 2

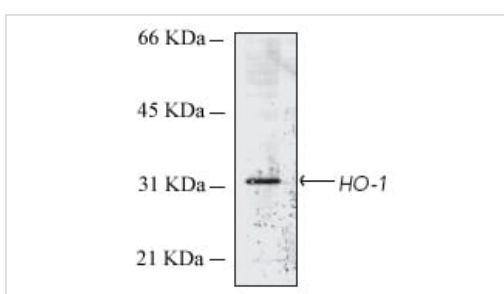
**Lane 5** : MDBK cell lysate

**Lane 6** : Dog liver microsome

**Lane 7** : Mouse liver microsome

**Predicted band size:** 34.6 kDa

This image was generated using the ascites version of the product.

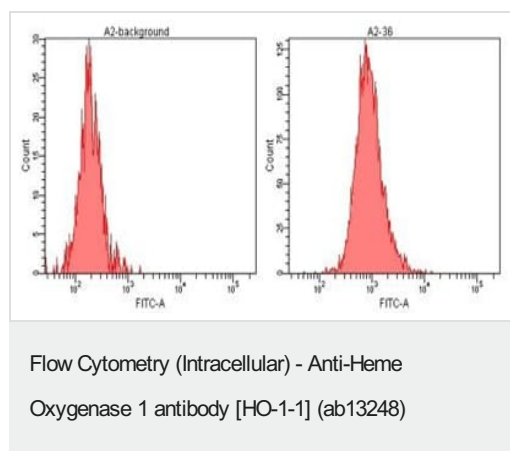


Western blot - Anti-Heme Oxygenase 1 antibody  
[HO-1-1] (ab13248)

Anti-Heme Oxygenase 1 antibody [HO-1-1] (ab13248) at 1/250  
dilution + Human microsome lysate

**Predicted band size:** 34.6 kDa

This image was generated using the ascites version of the product.



ab13248 at 10µg/ml staining Heme Oxygenase 1 in human lung cancer A2 cells by flow cytometry. The left image represents staining with isotype control antibody and the right image shows staining with ab13248.

This image was generated using the ascites version of the product.

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