Anti-Heme Oxygenase 1 antibody ab13243

Product name
Anti-Heme Oxygenase 1 antibody

Description
Rabbit polyclonal to Heme Oxygenase 1

Host species
Rabbit

Tested applications
Suitable for: WB, ICC/IF, Sandwich ELISA, IHC-P

Species reactivity
Reacts with: Mouse, Rat, Human

Immunogen
Recombinant rat HO-1 (Hsp32) lacking the membrane spanning region

General notes
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

Form
Liquid

Storage instructions
Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer
Preservative: 0.09% Sodium azide
Constituents: PBS, 50% Glycerol (glycerin, glycerine)

Purity
Protein A purified

Clonality
Polyclonal

Isotype
IgG

Applications

The Abpromise guarantee
Our Abpromise guarantee covers the use of ab13243 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
Function
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 sequestrated and destroyed.

Sequence similarities
Belongs to the heme oxygenase family.

Cellular localization
Microsome. Endoplasmic reticulum.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td>★★★★★ (3)</td>
<td>1/2000. Detects a band of approximately 32 kDa (predicted molecular weight: 34.6 kDa).</td>
</tr>
<tr>
<td>ICC/IF</td>
<td></td>
<td>Use a concentration of 1 - 5 µg/ml.</td>
</tr>
<tr>
<td>Sandwich ELISA</td>
<td></td>
<td>Use a concentration of 0.5 µg/ml. Can be paired for Sandwich ELISA with Mouse monoclonal [HO-1-1] to Heme Oxygenase 1 (ab13248). For sandwich ELISA, use this antibody as Detection at 0.5 µg/ml with Mouse monoclonal [HO-1-1] to Heme Oxygenase 1 (ab13248) as Capture.</td>
</tr>
<tr>
<td>IHC-P</td>
<td>★★★★★ (3)</td>
<td>Use a concentration of 1 - 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.</td>
</tr>
</tbody>
</table>

Images

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Heme Oxygenase 1 antibody (ab13243)
All lanes: Anti-Heme Oxygenase 1 antibody (ab13243) at 1/1000 dilution

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 Rabbit

Predicted band size: 34.6 kDa
Observed band size: 32 kDa

Hek293 & HL60 presumed negative or very low expression.

Loading control GAPDH at 38kDa

IHC image of Heme Oxygenase 1 staining in formalin fixed, paraffin embedded rat spleen normal 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 ab13243, 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.

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.
Western blot - Anti-Heme Oxygenase 1 antibody (ab13243) (Rat microsomes)

**Predicted band size:** 34.6 kDa

Alzheimer diseased section stained with ab13243.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Heme Oxygenase 1 antibody (ab13243)

ICC/IF image of ab13243 stained HepG2 cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab13243, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.
Sandwich ELISA - Anti-Heme Oxygenase 1 antibody (ab13243)

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.

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.com/abpromise or contact our technical team.

Terms and conditions

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