Product datasheet

Anti-Heme Oxygenase 1 antibody ab13243

Overview

Product name Anti-Heme Oxygenase 1 antibody
Description Rabbit polyclonal to Heme Oxygenase 1
Host species Rabbit
Tested applications Suitable for: WB, IHC-Fr, ICC/IF, Sandwich ELISA, IHC-P
Species reactivity Reacts with: Mouse, Rat, Dog, Human
Immunogen Recombinant rat HO-1 (Hsp32) lacking the membrane spanning region
Positive control Recombinant Human and Rat HO-1 (Hsp32) Protein. IHC-P: FFPE mouse spleen normal and rat spleen normal.

Properties

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: 50% Glycerol, Whole serum, PBS, pH 7.2
Purity Protein A purified
Clonality Polyclonal
Isotype IgG

Applications

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.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td>⭐⭐⭐⭐⭐urette 1/2000. Detects a band of approximately 32 kDa (predicted molecular weight: 34.6 kDa).</td>
<td></td>
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<tr>
<td>IHC-Fr</td>
<td>⭐⭐⭐⭐⭐</td>
<td>1/200.</td>
</tr>
<tr>
<td>ICC/IF</td>
<td></td>
<td>Use a concentration of 1 - 5 µg/ml.</td>
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</tbody>
</table>
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.

Images

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<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>
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<tr>
<td>IHC-P</td>
<td>★★★★☆</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>

Target

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.

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Western blot - 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

why is the actual band size different from the predicted?

Hek293 & HL60 presumed negative or very low expression.

Loading control GAPDH at 38kDa
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Heme Oxygenase 1 antibody (ab13243)

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.

Anti-Heme Oxygenase 1 antibody (ab13243) (Rat microsomes)

**Predicted band size:** 34.6 kDa
Alzheimer diseased section stained with 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.

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.
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• We investigate all quality concerns to ensure our products perform to the highest standards

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