abcam

Product datasheet

Anti-Heme Oxygenase 1 antibody [EPR1390Y] - BSA and Azide free ab221215

KO VALIDATED Recombinant RabMAb

5 Images

Overview

Product name	Anti-Heme Oxygenase 1 antibody [EPR1390Y] - BSA and Azide free
Description	Rabbit monoclonal [EPR1390Y] to Heme Oxygenase 1 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IP, ICC/IF, WB, Flow Cyt (Intra) **Unsuitable for:** IHC-P
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	HepG2, A549, rat kidney, rat and human spleen, mouse kidney cell lysate.
General notes	ab221215 is the carrier-free version of **ab68477**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR1390Y
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab221215 in the following tested applications.

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

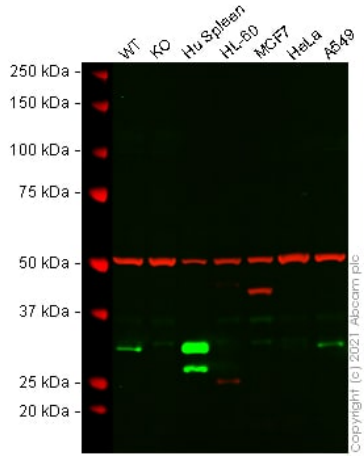
Application	Abreviews	Notes
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 33 kDa (predicted molecular weight: 33 kDa).
Flow Cyt (Intra)		Use at an assay dependent concentration. **ab199376** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Application notes Is unsuitable for IHC-P.

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.
Sequence similarities	Belongs to the heme oxygenase family.
Cellular localization	Microsome. Endoplasmic reticulum.

Images



Western blot - Anti-Heme Oxygenase 1 antibody [EPR1390Y] - BSA and Azide free (ab221215)

All lanes : Anti-Heme Oxygenase 1 antibody [EPR1390Y] (**ab68477**) at 1/10000 dilution

Lane 1 : Wild-type A549 cell lysate
Lane 2 : HMOX1 knockout A549 cell lysate
Lane 3 : Human Spleen tissue lysate
Lane 4 : HL-60 cell lysate
Lane 5 : MCF7 cell lysate
Lane 6 : HeLa cell lysate
Lane 7 : A549 cell lysate

Lysates/proteins at 20 µg per lane.

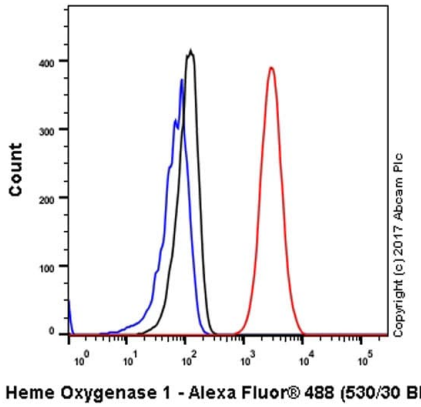
Performed under reducing conditions.

Predicted band size: 33 kDa
Observed band size: 33 kDa

This data was developed using the same antibody clone in a different buffer formulation (**ab68477**).

Lanes 1 - 7: Merged signal (red and green). Green - **ab68477** observed at 33 kDa. Red - loading control **ab7291** (Mouse anti-Alpha Tubulin [DM1A]) observed at 55 kDa.

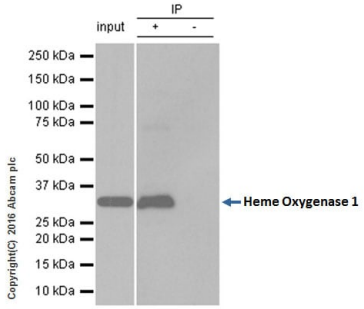
ab68477 was shown to react with Heme Oxygenase 1 in wild-type A549 cells in Western blot with loss of signal observed in HMOX1 knockout cell line **ab269503** (knockout cell lysate **ab269665**). Wild-type A549 and HMOX1 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with **ab68477** and **ab7291** (Mouse anti-Alpha Tubulin [DM1A]) overnight at 4 °C at a 1 in 10000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.



Flow Cytometry (Intracellular) - Anti-Heme Oxygenase 1 antibody [EPR1390Y] - BSA and Azide free (ab221215)

Intracellular Flow Cytometry analysis of A549 (human lung carcinoma) cells labeling with purified **ab68477** at 1/200 dilution (1ug/ml) (Red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488) (**ab150077**) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) (**ab172730**) was used as a isotype control.Cell without incubation with primary antibody and secondary antibody (Blue) were used as unlabeled control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab68477**).



Immunoprecipitation - Anti-Heme Oxygenase 1 antibody [EPR1390Y] - BSA and Azide free (ab221215)

ab68477 (purified) at 1/20 immunoprecipitating Heme Oxygenase 1 in A549 (Human lung carcinoma cell line) whole cell lysate.

Lane 1 (input): A549 whole cell lysate (10ug).

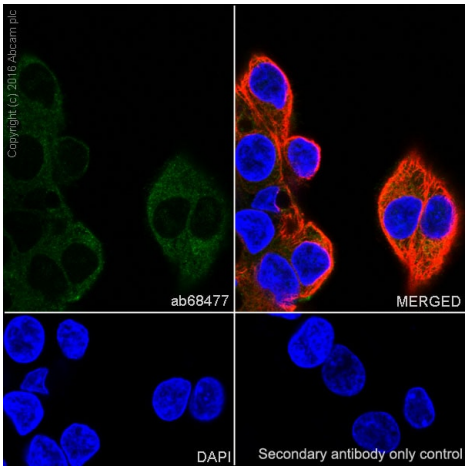
Lane 2 (+): **ab68477** + A549 whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of **ab133267** in HeLa whole cell lysate.

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab68477**).

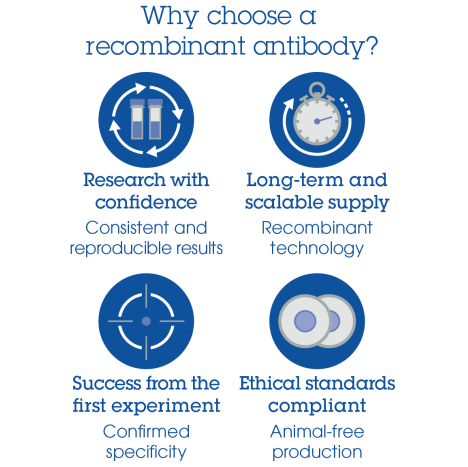


Immunocytochemistry/ Immunofluorescence - Anti-Heme Oxygenase 1 antibody [EPR1390Y] - BSA and Azide free (ab221215)

Immunocytochemistry/Immunofluorescence analysis of HepG2 (Human liver hepatocellular carcinoma cell line) cells labeling Heme Oxygenase 1 with purified **ab68477** at 1/100. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. A goat anti rabbit IgG (Alexa Fluor® 488) (**ab150077**) was used as the secondary antibody at a dilution of 1/1000. DAPI was used as a nuclear counterstain.

Negative control 1: PBS only.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab68477**).



Anti-Heme Oxygenase 1 antibody [EPR1390Y] - BSA and Azide free (ab221215)

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