abcam

Product datasheet

Anti-Ferritin antibody [EPR3004Y] - BSA and Azide free ab271854



リコンピナント

RabMAb

画像数3

製品の概要

免疫原

製品名 Anti-Ferritin antibody [EPR3004Y] - BSA and Azide free

製品の詳細 Rabbit monoclonal [EPR3004Y] to Ferritin - BSA and Azide free

由来種 Rabbit

特異性 We recommend following our protocol when testing ICC and recommend using lower dilution in

samples having low expression level of Ferritin.

アプリケーション 適用あり: WB, ICC/IF

適用なし: IHC-P

種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat 🔷

Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール ICC/IF: Jurkat cells

特記事項 ab271854 is the carrier-free version of ab75973.

Our <u>carrier-free</u> 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.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

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For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

バッファー pH: 7.20

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

ポリ(モノ モノクローナル **ウローン名** EPR3004Y

アイソタイプ IgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab271854の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		Use at an assay dependent concentration. Predicted molecular weight: 21 kDa.
ICC/IF		Use at an assay dependent concentration. We recommend following our protocol when testing ICC and recommend using lower dilution in samples having low expression level of Ferritin.

追加情報 Is unsuitable for IHC-P.

ターゲット情報

機能 Stores iron in a soluble, non-toxic, readily available form. Important for iron homeostasis. Has

ferroxidase activity. Iron is taken up in the ferrous form and deposited as ferric hydroxides after oxidation. Also plays a role in delivery of iron to cells. Mediates iron uptake in capsule cells of the

developing kidney.

配列類似性 Belongs to the ferritin family.

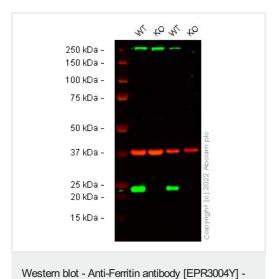
Contains 1 ferritin-like diiron domain.

製品の状態

Subunit structure: Oligomer of 24 subunits. There are two types of subunits: L (light) chain and H

(heavy) chain. The major chain can be light or heavy, depending on the species and tissue type. In the human liver, the heavy chain is predominant. The functional molecule forms a roughly spherical shell with a diameter of 12 nm and contains a central cavity into which the insoluble mineral iron

core is deposited.



BSA and Azide free (ab271854)

All lanes : Anti-Ferritin antibody [EPR3004Y] (<u>ab75973</u>) at 1/1000 dilution

Lane 1: Wild-type MCF7 cell lysate

Lane 2: FTH1 knockout MCF7 cell lysate

Lane 3: Wild-type HEK-293T ab255553 cell lysate

Lane 4: FTH1 knockout HEK-293T ab260185 cell lysate

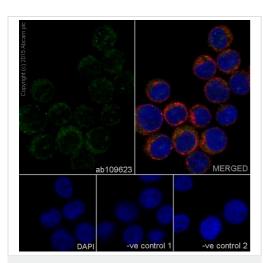
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 21 kDa
Observed band size: 24 kDa

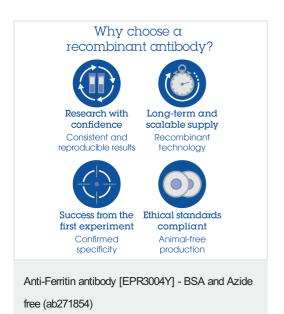
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab75973).

False colour image of Western blot: Anti-Ferritin antibody [EPR3004Y] staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (ab8245) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab75973 was shown to bind specifically to Ferritin. A band was observed at 24 kDa in wild-type MCF7 cell lysates with no signal observed at this size in FTH1 knockout cell line ab269493 (knockout cell lysate ab269655). To generate this image, wild-type and FTH1 knockout MCF7 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween[®] 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-Ferritin antibody [EPR3004Y] - BSA and Azide free (ab271854)

Immunofluorescence staining of Jurkat cells with purified ab75973 at a working dilution of 1/100, counter-stained with DAPI. The secondary antibody was Alexa Fluor® 488 goat anti-rabbit (ab150077), used at a dilution of 1/1000. ab7291, a mouse antitubulin antibody (1/1000), was used to stain tubulin along with ab150120 (Alexa Fluor® 594 goat anti-mouse, 1/1000), shown in the top right hand panel. The cells were fixed in 100% methanol and permeabilized using 0.1% Triton X 100. The negative controls are shown in bottom middle and right hand panels - for negative control 1, purified ab75973 was used at a dilution of 1/500 followed by an Alexa Fluor[®] 594 goat anti-mouse antibody (ab150120) at a dilution of 1/500. For negative control 2, ab7291 (mouse antitubulin) was used at a dilution of 1/500 followed by an Alexa Fluor® 488 goat anti-rabbit antibody (ab150077) at a dilution of 1/400. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab75973).



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