

### Anti-Ferritin antibody [EPR3004Y] ab75973

敲除验证
重组
RabMAb

★★★★☆
7 Abreviews
86 References
8 图像

#### 概述

产品名称	Anti-Ferritin抗体[EPR3004Y]
描述	兔单克隆抗体[EPR3004Y] to Ferritin
宿主	Rabbit
特异性	We recommend following our protocol when testing ICC and recommend using lower dilution in samples having low expression level of Ferritin.
经测试应用	<b>适用于:</b> ICC/IF, Flow Cyt (Intra), WB <b>不适用于:</b> IHC-P
种属反应性	<b>与反应:</b> Mouse, Rat, Human
免疫原	Synthetic peptide within Human Ferritin aa 50-150. The exact sequence is proprietary. Database link: <a href="#">P02794</a>
阳性对照	WB: HEK293T, Jurkat, SH-SY-5Y, C6 and Raw264.7 cell lysates; Human and rat brain lysates ICC/IF: Jurkat cells Flow Cyt (intra): SH-SY5Y cells
常规说明	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

#### 性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA
纯度	Protein A purified

克隆	单克隆
克隆编号	EPR3004Y
同种型	IgG

## 应用

**The Abpromise guarantee**      **Abpromise™承诺保证使用ab75973于以下的经测试应用**

“应用说明”部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		1/100. We recommend following our protocol when testing ICC and recommend using lower dilution in samples having low expression level of Ferritin.
Flow Cyt (Intra)		1/50.
WB	★★★★★ (6)	1/1000 - 1/2000. Detects a band of approximately 19, 21 kDa (predicted molecular weight: 21,19 kDa).

**应用说明** Is unsuitable for IHC-P.

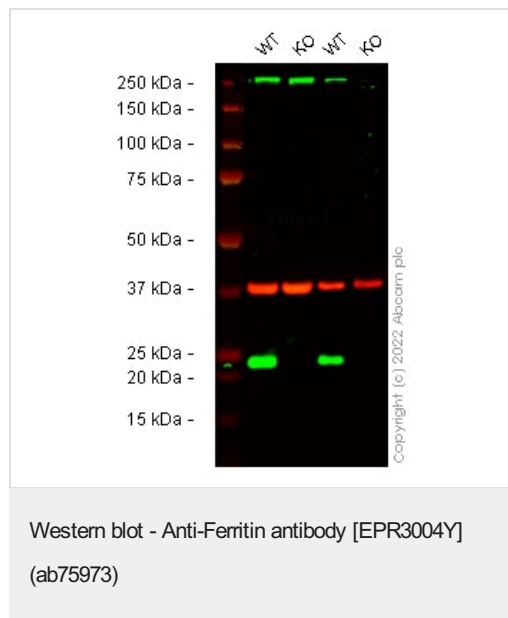
靶标

功能	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.
----	---

序列相似性	Belongs to the ferritin family. Contains 1 ferritin-like diiron domain.
-------	--

**形式** 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.

图片



**All lanes :** Anti-Ferritin antibody [EPR3004Y] (ab75973) 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

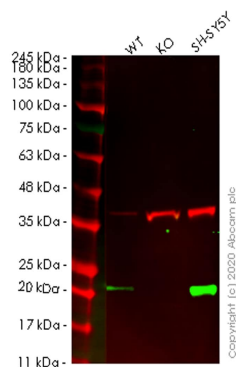
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 21,19 kDa

**Observed band size:** 24 kDa

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.



Western blot - Anti-Ferritin antibody [EPR3004Y]  
(ab75973)

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

**Lane 1** : Wild-type HEK293T cell lysate

**Lane 2** : FTH1 knockout HEK293T cell lysate

**Lane 3** : SH-SY5Y cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

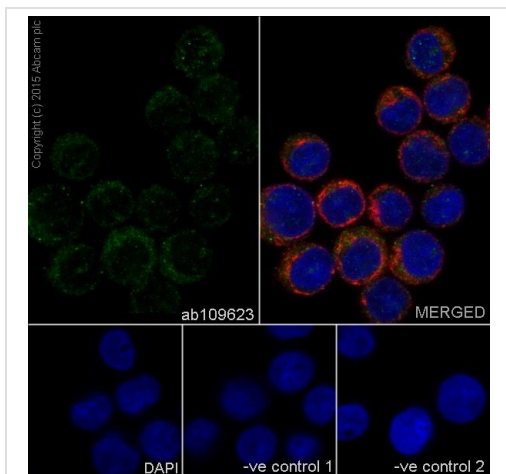
**All lanes** : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

**Predicted band size:** 21,19 kDa

**Observed band size:** 21 kDa

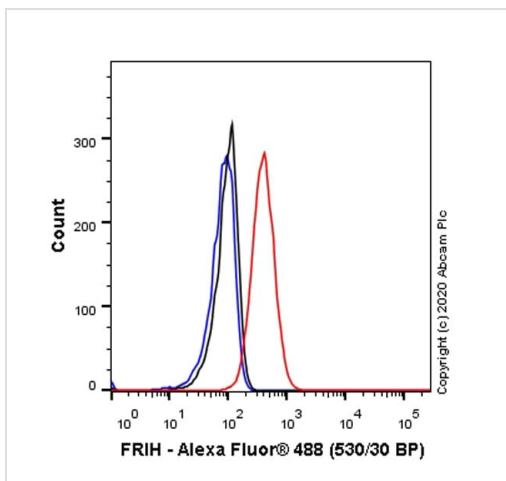
**Lanes 1-3:** Merged signal (red and green). Green - ab75973 observed at 21 kDa. Red - loading control [ab8245](#) observed at 36 kDa.

ab75973 Anti-Ferritin antibody [EPR3004Y] was shown to specifically react with Ferritin in wild-type HEK293T cells. Loss of signal was observed when knockout cell line [ab266581](#) (knockout cell lysate [ab256924](#)) was used. Wild-type and Ferritin knockout samples were subjected to SDS-PAGE. ab75973 and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated at room temperature for 2.5 hours at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



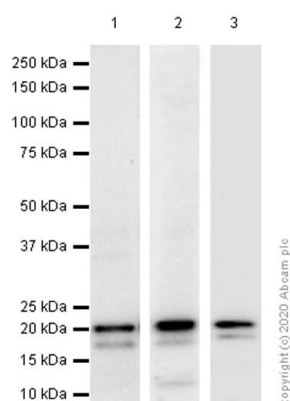
Immunocytochemistry/ Immunofluorescence - Anti-Ferritin antibody [EPR3004Y] (ab75973)

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<sup>®</sup> 488 goat anti-rabbit (**ab150077**), used at a dilution of 1/1000. **ab7291**, a mouse anti-tubulin antibody (1/1000), was used to stain tubulin along with **ab150120** (Alexa Fluor<sup>®</sup> 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<sup>®</sup> 594 goat anti-mouse antibody (**ab150120**) at a dilution of 1/500. For negative control 2, **ab7291** (mouse anti-tubulin) was used at a dilution of 1/500 followed by an Alexa Fluor<sup>®</sup> 488 goat anti-rabbit antibody (**ab150077**) at a dilution of 1/400.



Flow Cytometry (Intracellular) - Anti-Ferritin antibody [EPR3004Y] (ab75973)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized SH-SY5Y (Human neuroblastoma epithelial cell) cells labelling Ferritin with ab75973 at 1/50 dilution (1µg) (Red) compared with a Rabbit monoclonal IgG (**ab172730**) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor<sup>®</sup> 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody.



Western blot - Anti-Ferritin antibody [EPR3004Y]  
(ab75973)

**All lanes :** Anti-Ferritin antibody [EPR3004Y] (ab75973) at 1/2000 dilution

**Lane 1 :** Jurkat (Human T cell leukemia T lymphocyte) whole cell lysates

**Lane 2 :** HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysates

**Lane 3 :** C6 (Rat glial tumor glial cell) whole cell lysates

Lysates/proteins at 20 µg per lane.

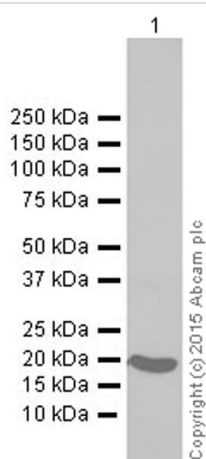
### Secondary

**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/20000 dilution

**Predicted band size:** 21,19 kDa

Observed MW: 21 kDa

Blocking/diluting buffer and concentration: 5% NFDM/TBST



Western blot - Anti-Ferritin antibody [EPR3004Y]  
(ab75973)

Anti-Ferritin antibody [EPR3004Y] (ab75973) at 1/10000 dilution (purified) + Raw264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate at 10 µg

### Secondary

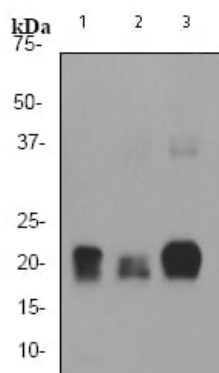
Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 21,19 kDa

**Observed band size:** 21 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



Western blot - Anti-Ferritin antibody [EPR3004Y]  
(ab75973)

**All lanes :** Anti-Ferritin antibody [EPR3004Y] (ab75973) at 1/2000 dilution (Unpurified)

**Lane 1 :** Jurkat (Human T cell leukemia cell line from peripheral blood) cell lysate

**Lane 2 :** SH-SY5Y (Human neuroblastoma cell line from bone marrow) cell lysate

**Lane 3 :** Human brain lysates

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** HRP labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 21,19 kDa

**Observed band size:** 19,21 kDa

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Ferritin antibody [EPR3004Y] (ab75973)

**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.cn/abpromise> or contact our technical team.

#### **Terms and conditions**

---

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