# abcam

### Product datasheet

## Anti-Ferritin Light Chain antibody [EPR5260] ab109373



יעלטעבע RabMAb

#### 14 References 画像数5

#### 製品の概要

製品名 Anti-Ferritin Light Chain antibody [EPR5260]

製品の詳細 Rabbit monoclonal [EPR5260] to Ferritin Light Chain

由来種 Rabbit

特異性 This antibody recognizes the light chain of Ferritin only.

アプリケーション 適用あり: Flow Cyt (Intra), WB

適用なし: ICC/IF or IHC-P

種交差性 交差種: Mouse. Human

交差が予測される動物種: Rat 🔷

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

ポジティブ・コントロール Human fetal liver, Hap1, HepG2 and HeLa cell lysates. Flow Cyt (intra): HeLa cells.

特記事項 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

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

Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C. 保存方法

バッファー pH: 7.20

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

精製度 Protein A purified

ポリモノ モノクローナル

**クローン名** EPR5260

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ab109373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
Flow Cyt (Intra)		1/100 - 1/500. <b>ab172730</b> - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB		1/10000 - 1/50000. Detects a band of approximately 19 kDa (predicted molecular weight: 20 kDa).

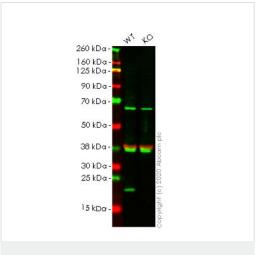
追加情報 Is unsuitable for ICC/IF or IHC-P.

#### ターゲット情報

機能 Stores iron in a soluble, non-toxic, readily available form. Important for iron homeostasis. 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. 関連疾患 Defects in FTL are the cause of hereditary hyperferritinemia-cataract syndrome (HHCS) [MIM:600886]. It is an autosomal dominant disease characterized by early-onset bilateral cataract. Affected patients have elevated level of circulating ferritin. HHCS is caused by mutations in the iron responsive element (IRE) of the FTL gene. Defects in FTL are the cause of neurodegeneration with brain iron accumulation type 3 (NBIA3) [MIM:606159]; also known as adult-onset basal ganglia disease. It is a movement disorder with heterogeneous presentations starting in the fourth to sixth decade. It is characterized by a variety of neurological signs including parkinsonism, ataxia, corticospinal signs, mild nonprogressive cognitive deficit and episodic psychosis. It is linked with decreased serum ferritin levels. 配列類似性 Belongs to the ferritin family.

Contains 1 ferritin-like diiron domain.

#### 画像



Western blot - Anti-Ferritin Light Chain antibody [EPR5260] (ab109373)

**All lanes :** Anti-Ferritin Light Chain antibody [EPR5260] (ab109373) at 1/2000 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: Ferritin knockout HeLa cell lysate

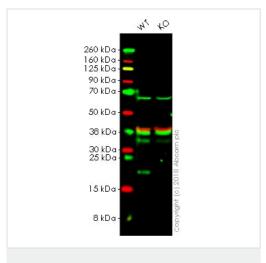
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 20 kDa

**Lanes 1-2:** Merged signal (red and green). Green - ab109373 observed at 20 kDa. Red - loading control **ab8245** observed at 37 kDa.

ab109373 Anti-FTL was shown to specifically react with Ferritin in wild-type HeLa cells. Loss of signal was observed when knockout cell line <a href="mailto:ab265533">ab265533</a> (knockout cell lysate <a href="mailto:ab256926">ab256926</a>) was used. Wild-type and FTL knockout samples were subjected to SDS-PAGE. ab109373 and Anti-GAPDH antibody [6C5] - Loading Control (<a href="mailto:ab8245">ab8245</a>) were incubated overnight at 4°C at 1 in 2000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (<a href="mailto:ab216773">ab216773</a>) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (<a href="mailto:ab216776">ab216776</a>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Ferritin Light Chain antibody [EPR5260] (ab109373)

**All lanes :** Anti-Ferritin Light Chain antibody [EPR5260] (ab109373) at 1/10000 dilution

Lane 1: Wild-type HAP1 whole cell lysate

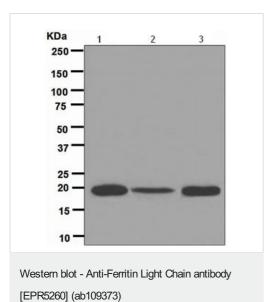
Lane 2: FTL (Ferritin Light Chain) knockout HAP1 whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 20 kDa

**Lanes 1 - 2:** Merged signal (red and green). Green - ab109373 observed at 20 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

ab109373 was shown to recognize Ferritin Light Chain in wild-type HAP1 cells as signal was lost at the expected MW in FTL (Ferritin Light Chain) knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and FTL (Ferritin Light Chain) knockout samples were subjected to SDS-PAGE. Ab109373 and <a href="mailto:ab9484">ab9484</a> (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/10000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed <a href="mailto:ab216773">ab216773</a> and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed <a href="mailto:ab216776">ab216776</a> secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

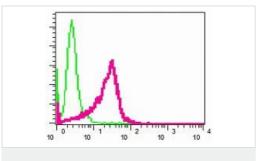


**All lanes :** Anti-Ferritin Light Chain antibody [EPR5260] (ab109373) at 1/10000 dilution

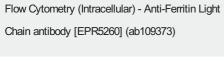
Lane 1 : Fetal liver lysate
Lane 2 : HepG2 cell lysate
Lane 3 : HeLa cell lysate

Lysates/proteins at 10 µg per lane.

**Predicted band size:** 20 kDa **Observed band size:** 19 kDa



Intracellular flow cytometric analysis of permeabilized HeLa cells using ab109373 at a dilution of 1/100 (red) or a rabbit lgG (negative) (green).





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