

Anti-Ferritin Light Chain antibody [FTL/1386] ab218400

敲除验证

3 References **9** 图像

概述

| | |
|-------|---|
| 产品名称 | Anti-Ferritin Light Chain抗体[FTL/1386] |
| 描述 | 小鼠单克隆抗体[FTL/1386] to Ferritin Light Chain |
| 宿主 | Mouse |
| 经测试应用 | 适用于: Protein Array, WB, IHC-P |
| 种属反应性 | 与反应: Human |
| 免疫原 | Recombinant fragment within Human Ferritin Light Chain aa 38-165. The exact sequence is proprietary. Database link: P02792 |
| 阳性对照 | WB: HAP1, A549, A431, HeLa cell lysates; Human liver, kidney, and testis lysates; IHC-P: Human pancreas and testicular carcinoma tissues. |
| 常规说明 | <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</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 long term. Avoid freeze / thaw cycle. |
| 存储溶液 | pH: 7.2 Preservative: 0.05% Sodium azide Constituents: 99% PBS, 0.05% BSA |
| 纯度 | Protein A/G purified |
| 纯化说明 | ab218400 is purified from Bioreactor Concentrate by Protein A/G. |
| 克隆 | 单克隆 |

克隆编号

FTL/1386

同种型

IgG2b

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab218400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 |
|---------------|------|---|
| Protein Array | | Use at an assay dependent concentration. |
| WB | | Use a concentration of 1 - 2 µg/ml. Predicted molecular weight: 20 kDa. |
| IHC-P | | Use a concentration of 0.25 - 0.5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. |

靶标

功能

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.

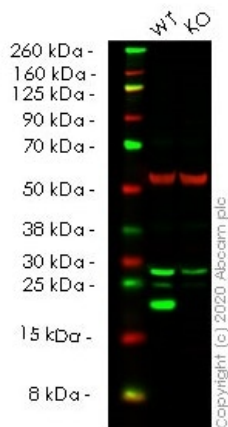
疾病相关

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.

序列相似性

Belongs to the ferritin family.
Contains 1 ferritin-like diiron domain.

图片



Western blot - Anti-Ferritin Light Chain antibody [FTL/1386] (ab218400)

All lanes : Anti-Ferritin Light Chain antibody [FTL/1386] (ab218400) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : FTL knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

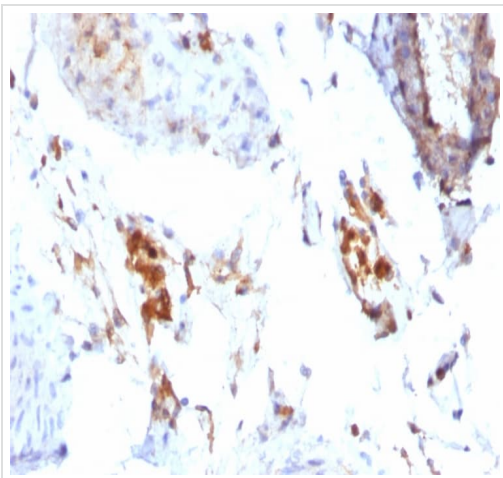
Performed under reducing conditions.

Predicted band size: 20 kDa

Observed band size: 20 kDa

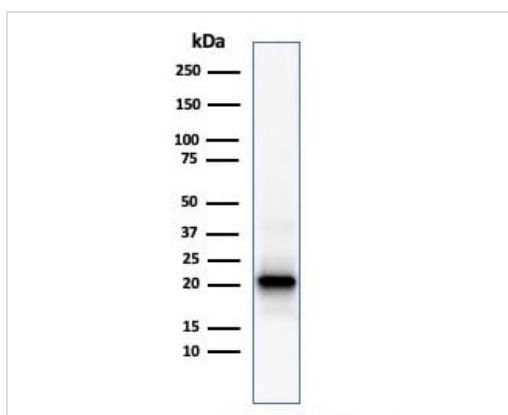
Lanes 1- 2: Merged signal (red and green). Green - ab218400 observed at 20 kDa. Red - Anti-alpha Tubulin antibody [EP1332Y] - Microtubule Marker ([ab52866](#)) observed at 50 kDa.

ab218400 was shown to react with Ferritin Light Chain in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line [ab265534](#) (knockout cell lysate [ab256927](#)) was used. Wild-type HeLa and FTL knockout HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab218400 and Anti-alpha Tubulin antibody [EP1332Y] - Microtubule Marker ([ab52866](#)) overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye®800CW) preadsorbed ([ab216772](#)) and Goat Anti-Rabbit IgG H&L (IRDye®680RD) preadsorbed ([ab216777](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ferritin Light Chain antibody [FTL/1386] (ab218400)

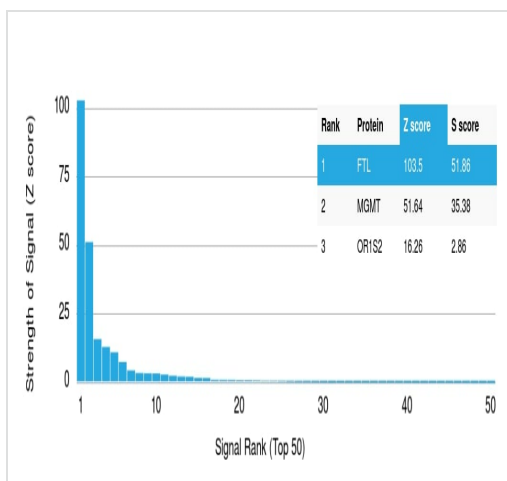
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human testicular carcinoma tissue labelling Ferritin Light Chain with ab218400 at 0.5 µg/mL (30 minutes at room temperature). Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate Buffer, pH 6.0, for 10-20 minutes followed by cooling at room temperature for 20 minutes.



Western blot - Anti-Ferritin Light Chain antibody [FTL/1386] (ab218400)

Anti-Ferritin Light Chain antibody [FTL/1386] (ab218400) at 2 µg/ml + Human kidney tissue lysate

Predicted band size: 20 kDa

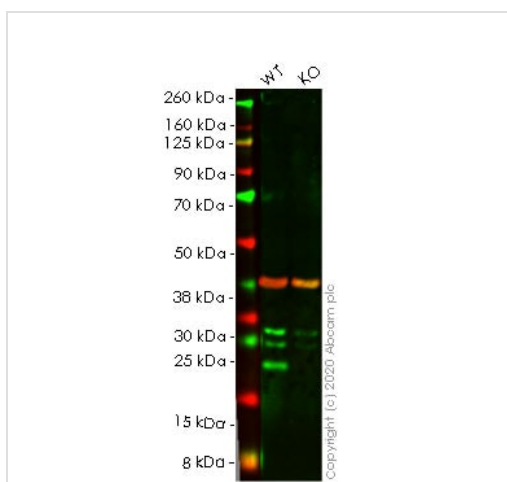


Protein Array - Anti-Ferritin Light Chain antibody
[FTL/1386] (ab218400)

ab218400 was tested in protein array against over 19000 different full-length human proteins.

Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target.

A MAb is specific to its intended target if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Western blot - Anti-Ferritin Light Chain antibody
[FTL/1386] (ab218400)

All lanes : Anti-Ferritin Light Chain antibody [FTL/1386]
(ab218400) at 1/500 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : FTL knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

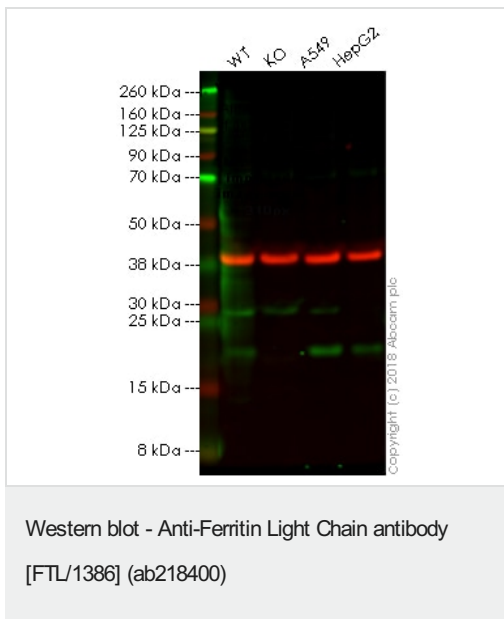
Performed under reducing conditions.

Predicted band size: 20 kDa

Lanes 1-2: Merged signal (red and green). Green - ab218400 observed at 20 kDa. Red - loading control **ab181602** observed at 37 kDa.

ab218400 Anti-FTL was shown to specifically react with Ferritin in wild-type HeLa cells. Loss of signal was observed when knockout cell line **ab265533** (knockout cell lysate **ab256926**) was used. Wild-type and FTL knockout samples were subjected to SDS-PAGE. ab218400 and Anti-GAPDH antibody[EPR16891] - Loading Control (**ab181602**) were incubated overnight at 4°C at 1 in 500 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preadsorbed (**ab216772**) and Goat Anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed (**ab216777**) secondary antibodies at 1 in 20000

dilution for 1 hour at room temperature before imaging.



All lanes : Anti-Ferritin Light Chain antibody [FTL/1386] (ab218400) at 1/1000 dilution

Lane 1 : Wild-type HAP1 whole cell lysate

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

Lane 3 : A549 whole cell lysate

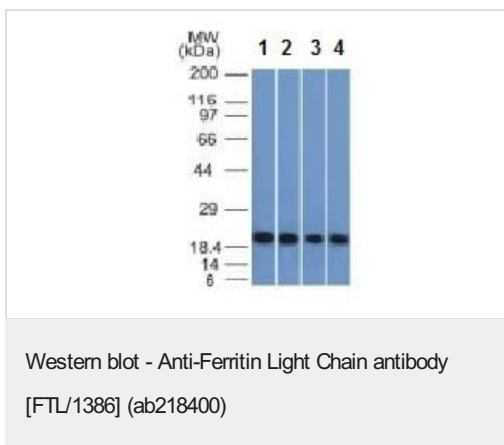
Lane 4 : Hep G2 whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 20 kDa

Lanes 1 -4: Merged signal (red and green). Green - ab218400 observed at 20 kDa. Red - loading control, **ab181602**, observed at 37 kDa.

ab218400 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. Ab218400 and **ab181602** (Rabbit anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed **ab216772** and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed **ab216777** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



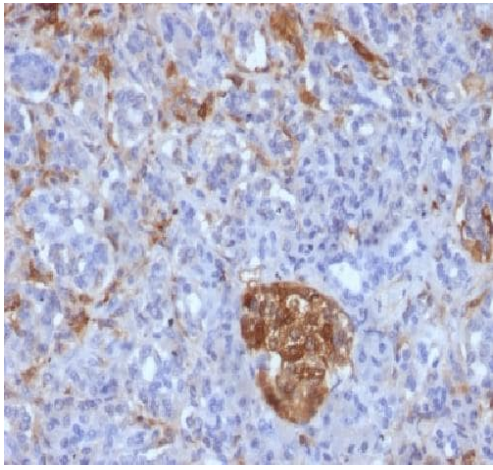
All lanes : Anti-Ferritin Light Chain antibody [FTL/1386] (ab218400) at 0.2 µg/ml

Lanes 1-2 : HeLa cell lysate

Lane 3 : Human liver lysate

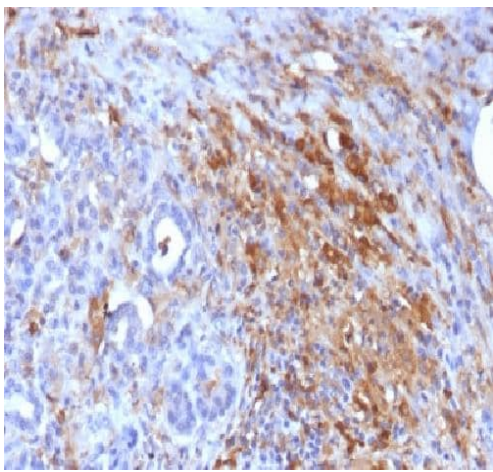
Lane 4 : Human testis lysate

Predicted band size: 20 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ferritin Light Chain antibody [FTL/1386] (ab218400)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded human pancreas tissue labeling Ferritin Light Chain with ab218400 at 0.2 µg/ml.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ferritin Light Chain antibody [FTL/1386] (ab218400)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded human pancreas tissue labeling Ferritin Light Chain with ab218400 at 0.2 µg/ml.

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