abcam

ab243096

Anti-Ferritin Light Chain antibody [CPT-R10-58-11]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	CPT-R10-58-11
Purification technique	Affinity purification Protein A
Concentration	0.493 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ELISA

Tested

Species	Synthetic peptide
Dilution info	0.1-1 µg/mL
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

Not recommended

Species	Synthetic peptide
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Synthetic peptide
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Synthetic peptide
Dilution info	-
Notes	-

IHC-Fr

Not recommended

Species	Human, Synthetic peptide
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/500
Notes	-

Not recommended

Species	Synthetic peptide
Dilution info	-
Notes	-

Target data

See full target information FTL

Function	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 (By similarity). Delivery to lysosomes by the cargo receptor NCOA4 for autophagic degradation and release or iron (PubMed:24695223).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C

Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

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

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

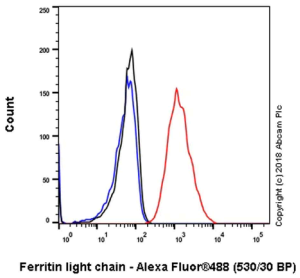
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

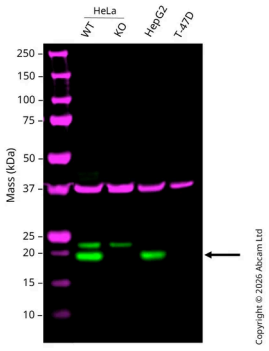
4 product images



Flow Cytometry (Intracellular) - Anti-Ferritin Light Chain antibody [CPT-R10-58-11] (ab243096)

Ferritin Light Chain Flow Cytometry (Intracellular) staining using rabbit Anti-Ferritin Light Chain antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized HepG2 (human liver hepatocellular carcinoma cell line) cell line labeling Ferritin Light Chain with ab243096 at 1/500 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) at 1/2000 dilution was used as the secondary antibody.



Western blot - Anti-Ferritin Light Chain antibody [CPT-R10-58-11] (ab243096)

Ferritin Light Chain Western blot staining using rabbit Anti-Ferritin Light Chain antibody

Western blot: Anti-Ferritin Light Chain antibody [CPT-R10-58-11] ab243096 staining at 1/1000 dilution, shown in green; Mouse anti GAPDH ab8245 loading control staining at 1/20000 dilution, shown in magenta. A band was observed at 19 kDa in Wild-type HeLa cell lysates with no signal observed at this size in FTL knockout HeLa cell line. To generate this image, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 5% 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 800CW and Goat anti-Mouse 680RD at 1/20,000 dilution.
All lanes:
Western blot - Anti-Ferritin Light Chain antibody [CPT-R10-58-11] (ab243096) at 1/1000 dilution

Lane 1:
Wild-type HeLa cell lysates at 20 µg

Lane 2:
Western blot - Human FTL knockout HeLa cell line (ab265533) at 20 µg

Lane 3:
HepG2 cell lysates at 20 µg

Lane 4:
T-47D cell lysates at 20 µg

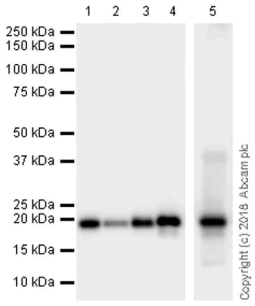
Secondary

All lanes:
Goat anti-Rabbit 800CW & Goat anti-Mouse 680RD at 1/20000 dilution

Performed under reducing conditions.

Predicted band size: 20 kDa

Observed band size: 19 kDa



Western blot - Anti-Ferritin Light Chain antibody [CPT-R10-58-11] (ab243096)

Ferritin Light Chain Western blot staining using rabbit Anti-Ferritin Light Chain antibody

Exposure time : Lane 1-4: 26 seconds, Lane 5: 5.5 seconds.
Blocking/Dilution buffer: 5% NFDM/TBST.

All lanes:
Western blot - Anti-Ferritin Light Chain antibody [CPT-R10-58-11] (ab243096) at 1/1000 dilution

Lane 1:
NCI-H460 (human lung cancer cell line) whole cell lysate at 20 µg

Lane 2:
HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate at 20 µg

Lane 3:
MCF7 (human breast adenocarcinoma cell line) whole cell lysate at 20 µg

Lane 4:
HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate at 20 µg

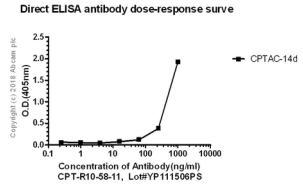
Lane 5:
Human brain lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 20 kDa

Observed band size: 19 kDa



ELISA - Anti-Ferritin Light Chain antibody [CPT-R10-58-11] (ab243096)

50ng CPTAC-14d (1000ng/mL, 50µL per well) was coated onto 96-wells. Serial dilutions (0, 0.2, 0.9, 3.9, 15, 62, 250, 1000ng/mL) of ab243096 (50µL) were incubated with CPTAC-14d in each well for 60 minutes by shaking. This was followed by adding goat anti-rabbit IgG, (H+L), phosphatase-conjugated secondary antibody (50µL) into each well and incubating for another 40 minutes. After washing, 50µL of PNPP was added and incubated for 15 minutes without shaking for color development. OD was read at 405nm within 5 minutes.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.