

FTH1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6886b

Specification

FTH1 Antibody (C-term) - Product Information

Application	FC, IHC-P, WB,E
Primary Accession	<u>P02794</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	21226
Antigen Region	154-183

FTH1 Antibody (C-term) - Additional Information

Gene ID 2495

Other Names Ferritin heavy chain, Ferritin H subunit, Cell proliferation-inducing gene 15 protein, Ferritin heavy chain, N-terminally processed, FTH1, FTH, FTHL6

Target/Specificity

This FTH1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 154-183 amino acids from the C-terminal region of human FTH1.

Dilution FC~~1:10~50 IHC-P~~1:50~100 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

FTH1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

FTH1 Antibody (C-term) - Protein Information

Name FTH1



Synonyms FTH, FTHL6

Function Stores iron in a soluble, non-toxic, readily available form. Important for iron homeostasis. Has ferroxidase activity (PubMed:<u>9003196</u>). Iron is taken up in the ferrous form and deposited as ferric hydroxides after oxidation (PubMed:<u>9003196</u>). Also plays a role in delivery of iron to cells (By similarity). Mediates iron uptake in capsule cells of the developing kidney (By similarity). Delivery to lysosomes is mediated by the cargo receptor NCOA4 for autophagic degradation and release of iron (PubMed:<u>24695223</u>, PubMed:<u>26436293</u>).

Cellular Location Cytoplasm. Lysosome. Cytoplasmic vesicle, autophagosome

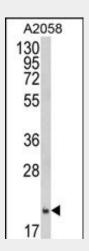
Tissue Location Expressed in the liver.

FTH1 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

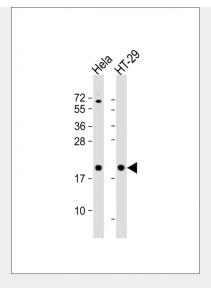
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

FTH1 Antibody (C-term) - Images

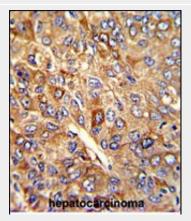


Western blot analysis of FTH1 Antibody (C-term) (Cat. #AP6886b) in A2058 cell line lysates (35ug/lane). FTH1 (arrow) was detected using the purified Pab.

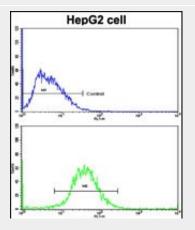




All lanes : Anti-FTH1 Antibody (C-term) at 1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: HT-29 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 21 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human hepatocarcinoma with FTH1 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of HepG2 cells using FTH1 Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



FTH1 Antibody (C-term) - Background

FTH1 is the heavy subunit of ferritin, the major intracellular iron storage protein in prokaryotes and eukaryotes. It is composed of 24 subunits of the heavy and light ferritin chains. Variation in ferritin subunit composition may affect the rates of iron uptake and release in different tissues. A major function of ferritin is the storage of iron in a soluble and nontoxic state. Defects in ferritin proteins are associated with several neurodegenerative diseases.

FTH1 Antibody (C-term) - References

Almeida, R.S., et.al., PLoS Pathog. 4 (11), E1000217 (2008)