10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Ferritin Heavy Chain Rabbit mAb

Catalog # AP74984

Product Information

Application	WB, FC
Primary Accession	P02794
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	21226

Additional Information

Gene ID	2495
Other Names	FTH1
Dilution	WB~~1:500-1:2000 FC~~1:20-1:50
Format	1xPBS(pH 7.4), 150mM NaCl, 50% Glycerol, 0.02% Sodium azide and 0.05% BSA
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

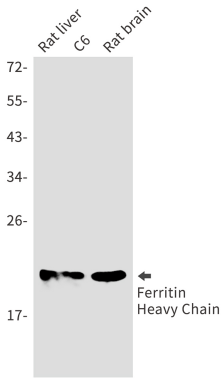
Protein Information

Name	FTH1
Synonyms	FTH, FTHL6
Function	Stores iron in a soluble, non-toxic, readily available form. Important for iron homeostasis. Has ferroxidase activity (PubMed:9003196). Iron is taken up in the ferrous form and deposited as ferric hydroxides after oxidation (PubMed:9003196). 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:24695223, PubMed:26436293).
Cellular Location	Cytoplasm. Lysosome. Cytoplasmic vesicle, autophagosome
Tissue Location	Expressed in the liver.

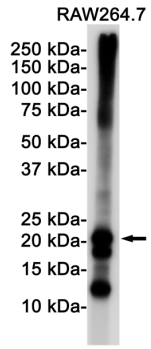
Background

The assembled ferritin molecule, often referred to as a nanocage, can store up to 4,500 atoms of iron. It forms a holoenzyme of ~450 kDa, consisting of 24 subunits made up of two types of polypeptide chains: ferritin heavy chain and ferritin light chain, each having unique functions. Ferritin heavy chains catalyze the first step in iron storage, the oxidation of Fe(II), whereas ferritin light chains promote the nucleation of ferrihydrite, enabling storage of Fe(III).

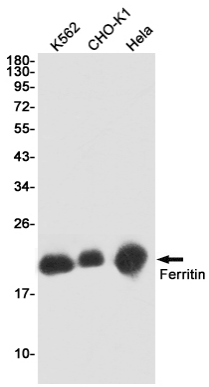
Images



Western blot analysis of Ferritin Heavy Chain in rat liver, C6, rat brain lysates using Ferritin Heavy Chain antibody.

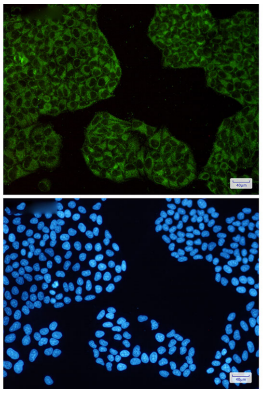


Western blot analysis of Ferritin in Raw264.7 lysates using Ferritin antibody.



Western blot analysis of Ferritin in K562, CHO-K1, Hela lysates using Ferritin antibody

Immunocytochemistry analysis of Ferritin(green) in Hela using Ferritin antibody,and DAPI(blue).



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