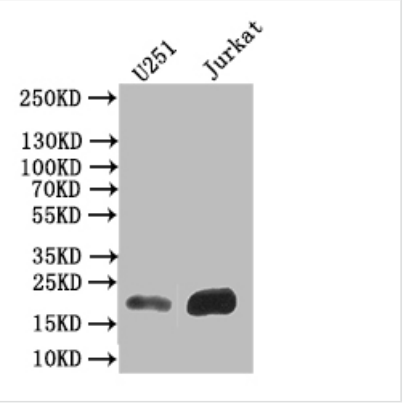
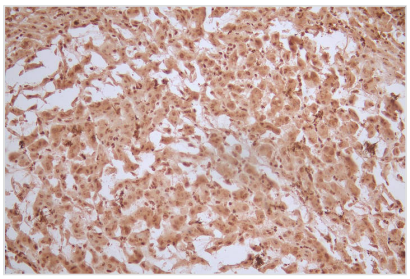
FTH1 Recombinant Monoclonal Antibody

Product Code	CSB-RA009030MA1HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P02794
Immunogen	Recombinant Human FTH1 protein
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC, FC; Recommended dilution: WB:1:1000-1:5000, IHC:1:20-1:200, FC:1:20-1:200
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
Purification Method	Affinity-chromatography
Isotype	Mouse IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Neuroscience?Cancer?Cardiovascular;Metabolism;Signal transduction
Gene Names	FTH1
Clone No.	18C10

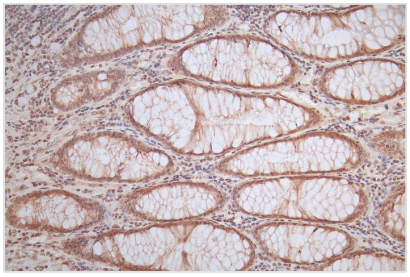
Image



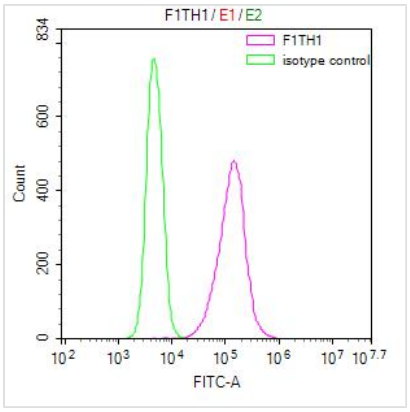
Western Blot
Positive WB detected in: U251 whole cell lysate,JK whole cell lysate
All lanes: FTH1 antibody at 1:500
Secondary
Goat polyclonal to mouse IgG at 1/50000 dilution
Predicted band size: 22 kDa
Observed band size: 22 kDa



IHC image of CSB-RA009030MA1HU diluted at 1:50 and staining in paraffin-embedded human liver tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4 °C overnight. The primary is detected by a Goat anti-Mouse IgG labeled by HRP and visualized using 0.05% DAB.



IHC image of CSB-RA009030MA1HU diluted at 1:50 and staining in paraffin-embedded human rectal cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-Mouse IgG labeled by HRP and visualized using 0.05% DAB.



Overlay Peak curve showing 293 cells stained with CSB-RA009030MA1HU (red line) at 1:50. The cells were fixed in 4% formaldehyde (15min) and permeated by 0.2% TritonX-100 for 10min. Then 10% normal goat serum was Incubated to block non-specific protein-protein interactions followed by the antibody (1µg /1*10^6cells) for 45 min at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-Mouse IgG(H+L) at 1/200 dilution for 35 min at 4 °C. Isotype control antibody (green line) was mouse IgG1 (1µg/1*10^6cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

The production of the recombinant monoclonal antibody targeting FTH1 involves a series of steps. Firstly, FTH1 antibody genes are incorporated into plasmid vectors. These modified plasmid vectors are then introduced into suitable host cells for expression using exogenous protein expression technology. Following this, the FTH1 recombinant monoclonal antibody undergoes purification via affinity chromatography. It has undergone thorough validation for specific applications, including ELISA, WB, IHC, and FC. It's important to note that this antibody binds to both human and mouse FTH1 proteins.

FTH1 is a critical protein involved in iron homeostasis within cells. It functions as an iron-storage protein, helping store excess iron and release it when needed for cellular processes. Proper regulation of FTH1 and ferritin complexes is

essential for maintaining iron balance and preventing iron-related toxicity.