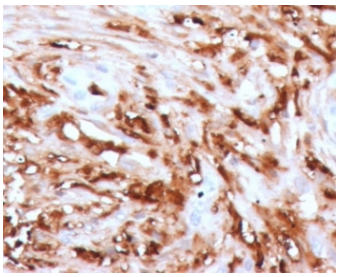
Ferritin Light Chain Antibody / FTL Antibody [clone FTLC1-1] (V7209)

Catalog No.	Formulation	Size
V7209-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7209-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7209SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b
Clone Name	FTLC1-1
Purity	Protein G affinity chromatography
Gene ID	2512
Localization	Cytoplasmic
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This Ferritin antibody is available for research use only.

Ferritin Light Chain Antibody for WB western blot analysis of human HeLa cell lysate. A band is detected at approximately 20 kDa, consistent with the predicted molecular weight of Ferritin Light Chain / FTL. Clone FTLC1-1 was used as the detecting antibody, demonstrating specific recognition of the ferritin light chain subunit in SDS-PAGE immunoblot analysis.



IHC staining of FFPE human pancreas with Ferritin antibody (clone FTLC1-1). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.

Description

Ferritin Light Chain (FTL) is a cytosolic iron storage protein encoded by the FTL gene and expressed in most mammalian tissues. Ferritin functions as a multimeric protein complex composed of heavy and light chain subunits that assemble into a spherical structure capable of storing thousands of iron atoms. Ferritin Light Chain Antibody / FTL Antibody (clone FTLC1-1) supports western blot analysis of ferritin light chain expression, allowing researchers to examine iron storage proteins and changes in iron metabolism across biological samples.

Western blot detection of ferritin light chain is widely used to evaluate intracellular iron storage capacity and ferritin complex composition. Because ferritin light chain is a soluble cytoplasmic protein that is abundant in many cell types, it produces clear and reliable bands in SDS-PAGE immunoblot assays. Ferritin Light Chain Antibody / FTL Antibody is therefore particularly useful for western blot studies investigating iron metabolism, oxidative stress responses, and regulation of ferritin expression under different physiological or experimental conditions.

The ferritin complex typically contains 24 subunits composed of ferritin heavy chain (FTH1) and ferritin light chain (FTL). The ferritin light chain contributes to nucleation and stabilization of the iron mineral core within the ferritin shell, supporting efficient long-term storage of iron in a non-toxic form. By controlling iron sequestration within ferritin particles, the FTL subunit helps protect cells from iron-driven oxidative damage while maintaining iron availability for metabolic processes. Western blot analysis using FTL antibody reagents allows researchers to monitor expression of this important iron storage protein and compare ferritin levels across tissues or experimental models.

Ferritin light chain is broadly expressed in many tissues including liver, spleen, bone marrow, and macrophage populations involved in iron recycling. Cellular ferritin expression is tightly regulated through iron-responsive translational mechanisms that rapidly increase ferritin synthesis when intracellular iron levels rise. Because ferritin expression responds dynamically to iron availability, western blot analysis of FTL protein levels provides an effective method for assessing cellular iron status and metabolic adaptation.

FTL antibody reagents are commonly described in the literature using several related protein names including ferritin light chain antibody, ferritin L-chain antibody, and ferritin light polypeptide antibody. These names refer to the same ferritin subunit encoded by the FTL gene. Clone FTLC1-1 is designed to detect ferritin light chain in protein lysates and supports western blot analysis of iron storage proteins in cell and tissue samples. Ferritin Light Chain Antibody / FTL Antibody therefore provides a useful tool for studies focused on ferritin regulation, iron homeostasis, and cellular responses to oxidative stress.

For highly specific ferritin light chain detection validated by large-scale protein microarray screening, see our FTL Antibody / Ferritin Complex Assembly Antibody page featuring clone FTL/1387 with WB, IHC, and protein microarray specificity validation data.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the Ferritin antibody to be titered up or down for optimal performance.

Immunogen

Amino acids 38-165 of human FTL were used as the immunogen for this Ferritin Light Chain Antibody for WB.

Storage

Store the Ferritin antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

Ferritin light chain antibody, FTL antibody, ferritin L-chain antibody, ferritin light polypeptide antibody

References (1)