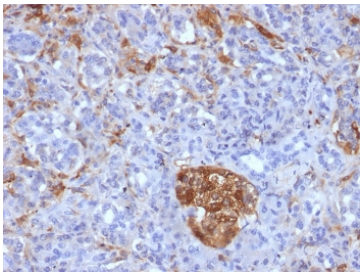
Ferritin Light Chain Antibody / FTL Antibody [clone FTL/1386] (V3351)

Catalog No.	Formulation	Size
V3351-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3351-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3351SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

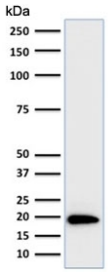
Citations (1)

Bulk quote request

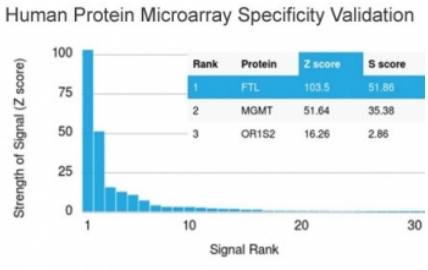
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	FTL/1386
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
UniProt	P02792
Localization	Cytoplasmic
Applications	ELISA: order BSA/sodium azide-free format for coating Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 0.25-0.5ug/ml
Limitations	This Ferritin Light Chain antibody is available for research use only.



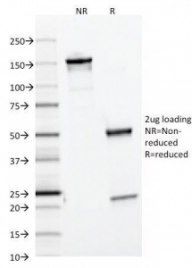
Ferritin Light Chain Antibody Human Pancreas Tissue IHC. Immunohistochemistry staining of FFPE human pancreas with Ferritin Light Chain antibody (clone FTL/1386). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



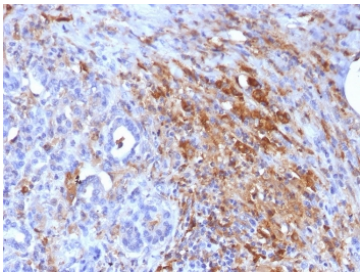
Ferritin Light Chain Antibody HeLa Cell WB. Western blot testing of human HeLa lysate with Ferritin Light Chain Antibody for Western Blotting (clone FTL/1386). Predicted molecular weight: ~20 kDa.



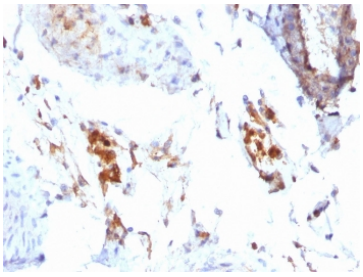
Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Ferritin Light Chain antibody (clone FTL/1386). These results demonstrate the foremost specificity of the FTL/1386 mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



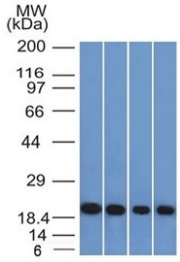
SDS-PAGE analysis of purified, BSA-free Ferritin Light Chain antibody (clone FTL/1386) as confirmation of integrity and purity.



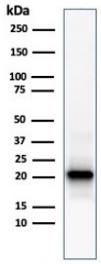
Ferritin Light Chain Antibody Pancreas IHC. Immunohistochemistry staining of FFPE human pancreas with Ferritin Light Chain antibody (clone FTL/1386). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



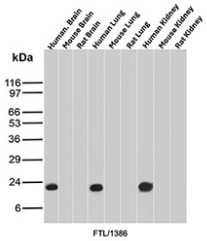
Ferritin Light Chain Antibody Testicular Carcinoma IHC. Immunohistochemistry staining of FFPE human testicular carcinoma with Ferritin Light Chain antibody (clone FTL/1386). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



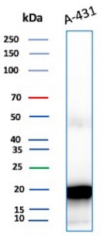
Western blot testing of human 1) A431, 2) HeLa, 3) liver and 4) testis lysate with Ferritin Light Chain antibody (clone FTL/1386). Predicted molecular weight: ~20 kDa.



Ferritin Light Chain Antibody Kidney Tissue WB. Western blot testing of human kidney lysate with Ferritin Light Chain Antibody for Western Blotting (clone FTL/1386). Predicted molecular weight: ~20 kDa.



Ferritin Light Chain Antibody for Western Blotting analysis of brain, lung, and kidney tissue lysates. Lane 1: human brain, Lane 2: mouse brain, Lane 3: rat brain, Lane 4: human lung, Lane 5: mouse lung, Lane 6: rat lung, Lane 7: human kidney, Lane 8: mouse kidney, Lane 9: rat kidney. A band is detected at approximately 20 kDa, consistent with the predicted molecular weight of Ferritin Light Chain / FTL. Clone FTL/1386 was used as the detecting antibody, demonstrating ferritin light chain expression across multiple mammalian tissues.



Ferritin Light Chain Antibody A-431 WB. Western blot analysis of A-431 cell lysate using Ferritin Light Chain Antibody detects a strong band at approximately 20 kDa, consistent with ferritin light chain / FTL. This western blotting antibody supports detection of the ferritin light chain subunit involved in intracellular iron storage, iron homeostasis, and oxidative stress-associated metabolic regulation pathways.

Description

Ferritin Light Chain (FTL) is a cytoplasmic iron storage protein encoded by the FTL gene and expressed in most mammalian tissues. Ferritin proteins assemble into a multimeric complex composed of ferritin heavy chain and ferritin light chain subunits that together form a spherical protein shell capable of storing thousands of iron atoms. Ferritin Light Chain Antibody / FTL Antibody (clone FTL/1386) is designed specifically to support immunoblot analysis of the ferritin light chain subunit in cell and tissue lysates, enabling researchers to evaluate iron storage proteins and monitor changes in iron metabolism.

Western blotting provides a widely used method for detecting ferritin light chain protein in biological samples. Because ferritin light chain is a soluble cytoplasmic protein with a relatively small molecular size, it produces a clear and well-defined band in SDS-PAGE immunoblot analysis. Ferritin Light Chain Antibody / FTL Antibody allows researchers to examine FTL protein levels across different cell types, tissues, and experimental conditions. Immunoblot detection of FTL is frequently used to compare ferritin expression between normal and disease models, or to assess changes in iron metabolism in response to cellular stress and metabolic signaling pathways.

The ferritin complex consists of 24 subunits that assemble into a nanocage capable of storing iron in a mineralized form. The ferritin light chain subunit contributes to nucleation and stabilization of the iron mineral core, facilitating efficient iron sequestration. This process prevents accumulation of free iron, which can catalyze formation of reactive oxygen species and cause oxidative damage. Western blot analysis using an FTL antibody enables investigation of ferritin subunit composition and regulation of intracellular iron storage mechanisms.

FTL expression is regulated through iron-responsive elements present in the ferritin mRNA transcript. When intracellular iron levels increase, translational repression of ferritin is relieved and ferritin protein synthesis increases rapidly. As a result, ferritin light chain levels often change dynamically in response to iron availability, oxidative stress, inflammatory signaling, and metabolic demand. Western blot detection using Ferritin Light Chain Antibody / FTL Antibody therefore

provides a useful tool for examining cellular responses to iron fluctuations and studying the regulatory pathways controlling ferritin expression.

Ferritin light chain is broadly expressed across many tissues including liver, spleen, brain, kidney, and macrophage-rich environments where iron storage and recycling occur. In research studies, FTL antibody reagents are commonly referenced using related names including ferritin light chain antibody, ferritin L-chain antibody, and ferritin light polypeptide antibody. These terms refer to the same protein encoded by the FTL gene. Ferritin Light Chain Antibody / FTL Antibody (clone FTL/1386) supports immunoblot-based studies of ferritin expression, iron storage biology, and molecular mechanisms governing cellular iron homeostasis.

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 Light Chain 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.

Storage

Store the Ferritin Light Chain 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)

Copyright © NSJ Bioreagents. All rights reserved.