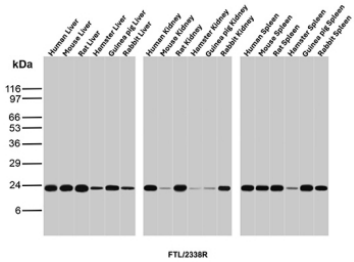
Ferritin Light Chain Antibody for WB / FTL Western Blot Antibody [clone FTL/2338R] (V3569)

Catalog No.	Formulation	Size
V3569-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3569-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3569SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3569IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

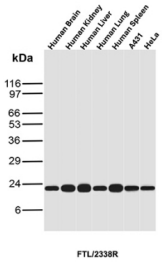
Recombinant RABBIT MONOCLONAL

Bulk quote request

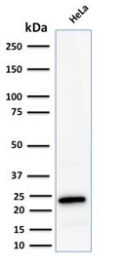
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat, Hamster, Guinea pig, Rabbit
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	FTL/2338R
Purity	Protein A affinity chromatography
UniProt	P02792
Localization	Cytoplasmic
Applications	Western Blot : 2-4ug/ml (Human/Mouse/Rat/Hamster/Guinea pig/Rabbit) Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT (Human)
Limitations	This Ferritin Light Chain Antibody for WB / FTL Western Blot Antibody is available for research use only.



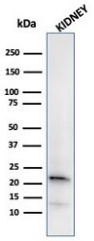
Ferritin Light Chain Antibody for WB Multi-Species. Western blot analysis of human, mouse, rat, hamster, guinea pig, and rabbit liver, kidney, and spleen tissue lysates using Ferritin Light Chain Antibody detects prominent bands at approximately 20-24 kDa across most tested species and tissue samples, consistent with ferritin light chain / FTL. This FTL western blot antibody demonstrates broad cross-species reactivity supporting the conserved role of ferritin light chain in iron sequestration, ferritin complex assembly, oxidative stress response, and maintenance of cellular iron homeostasis in metabolically active tissues.



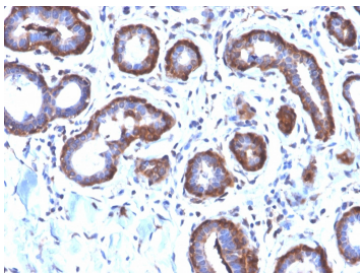
Ferritin Light Chain Antibody for WB Multi-Sample. Western blot analysis of human brain, human kidney, human liver, human lung, human spleen, A431, and HeLa lysates using Ferritin Light Chain Antibody detects strong bands at approximately 20-24 kDa across all tested tissue and cell line samples, consistent with ferritin light chain / FTL. This recombinant rabbit monoclonal antibody supports detection of FTL in metabolically active tissues and epithelial-derived tumor cells involved in iron storage and oxidative stress-associated metabolic regulation pathways.



Ferritin Light Chain Antibody for WB HeLa. Western blot testing of human HeLa lysate with Ferritin Light Chain antibody. Predicted molecular weight: ~20 kDa.



Ferritin Light Chain Antibody for WB Kidney. Western blot testing of human kidney lysate with Ferritin Light Chain antibody. Predicted molecular weight: ~20 kDa.



Ferritin Light Chain Antibody Breast Cancer IHC. Immunohistochemistry testing of FFPE human breast carcinoma with recombinant Ferritin Light Chain antibody (clone FTL/2338R). Required HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.

Description

Ferritin light chain (FTL) is a cytoplasmic iron storage protein that functions together with ferritin heavy chain to regulate intracellular iron sequestration, oxidative stress protection, and cellular iron homeostasis. FTL forms the structural shell of the ferritin complex and contributes to long-term iron mineralization and storage in metabolically active tissues. Ferritin Light Chain Antibody for WB is useful for studies examining iron metabolism, oxidative stress-associated signaling pathways, ferritin complex biology, and iron-dependent cellular regulation.

FTL antibody, also referred to as Ferritin light chain antibody and Ferritin L antibody in the literature, recognizes a highly conserved ferritin subunit encoded on chromosome 19q13.33. Ferritin light chain localizes predominantly to the

cytoplasm, where it participates in assembly of multimeric ferritin storage complexes responsible for intracellular iron buffering and detoxification. FTL expression is widespread in metabolically active tissues including liver, spleen, lung, kidney, and brain, reflecting the fundamental role of ferritin-mediated iron storage across diverse cellular systems.

Ferritin Light Chain Antibody for WB / FTL Western Blot Antibody (clone FTL/2338R) is optimized for detection of ferritin light chain in western blot applications involving tissue lysates and cultured cell populations. This recombinant rabbit monoclonal antibody demonstrates strong detection of FTL at approximately 20-24 kDa across multiple human tissues and epithelial-derived cell lines including A431 and HeLa cells. The broad tissue expression profile supports the utility of clone FTL/2338R in studies involving iron sequestration, oxidative stress biology, ferritin complex regulation, and metabolic adaptation pathways.

Ferritin complexes are essential for maintaining intracellular iron balance while limiting formation of reactive oxygen species generated through iron-dependent oxidative reactions. The ferritin light chain subunit contributes to stabilization and mineralization of stored iron within the ferritin nanocage, complementing the ferroxidase activity of ferritin heavy chain. Altered FTL expression has been associated with neurodegeneration, inflammatory signaling, cancer metabolism, iron overload disorders, and oxidative stress-associated tissue injury.

FTL expression is particularly prominent in tissues with high metabolic demand or active iron turnover, including liver, spleen, lung, and kidney. In western blot analysis, ferritin light chain is typically observed at approximately 20-24 kDa, consistent with the expected molecular weight of the mature ferritin light chain protein. Because ferritin expression is responsive to iron availability, oxidative stress, inflammatory cytokines, and metabolic signaling pathways, FTL serves as a useful marker for investigations involving iron-responsive cellular adaptation and metabolic regulation.

This recombinant rabbit monoclonal Ferritin Light Chain Antibody supports research involving iron metabolism, ferritin complex assembly, oxidative stress biology, intracellular iron sequestration, neurodegenerative disease pathways, inflammatory signaling, and tumor-associated metabolic adaptation. Clone FTL/2338R may be incorporated into western blot and tissue-based investigations examining iron homeostasis and ferritin-associated cellular regulation in normal and diseased tissues.

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

Optimal dilution of the Ferritin Light Chain Antibody for WB / FTL Western Blot Antibody should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Amino acids 38-165 of human FTL1 were used as the immunogen for this recombinant 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

FTL antibody, Ferritin light chain antibody, Ferritin L antibody, Iron storage protein antibody, Ferritin light polypeptide antibody

References (1)