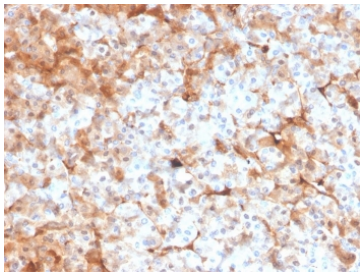
# FTL Antibody / Ferritin Light Chain [clone FTL/3100] (V8459)

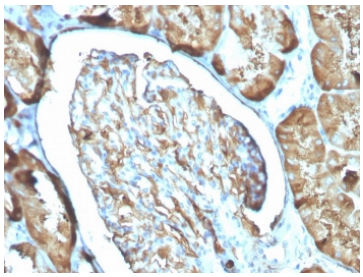
| Catalog No. | Formulation | Size |
|---|---|---|
| V8459-100UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 100 ug |
| V8459-20UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 20 ug |
| V8459SAF-100UG | 1 mg/ml in 1X PBS; BSA free, sodium azide free | 100 ug |

**Bulk quote request**

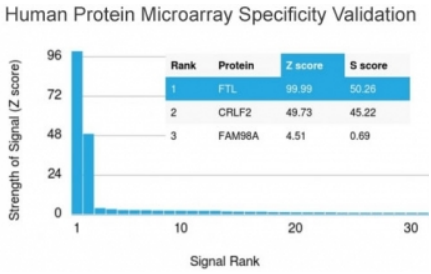
| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human |
| **Format** | Purified |
| **Host** | Mouse |
| **Clonality** | Monoclonal (mouse origin) |
| **Isotype** | Mouse IgG2b, kappa |
| **Clone Name** | FTL/3100 |
| **Purity** | Protein G affinity chromatography |
| **UniProt** | P02792 |
| **Localization** | Cytoplasmic |
| **Applications** | Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT<br>Western blot: 2-4ug/ml |
| **Limitations** | This FTL antibody is available for research use only. |



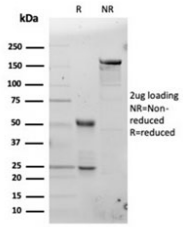
IHC staining of FFPE human pancreas with FTL antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



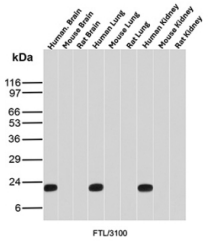
FTL Antibody Kidney Immunohistochemistry. IHC staining of FFPE human kidney with FTL antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



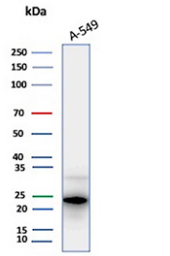

Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using FTL antibody. These results demonstrate the foremost specificity of the FTL/3100 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged 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.



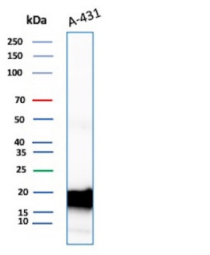

SDS-PAGE analysis of purified, BSA-free FTL antibody as confirmation of integrity and purity.




FTL Antibody Multi-Tissue WB. Western blot analysis of human brain, mouse brain, rat brain, human lung, mouse lung, rat lung, human kidney, mouse kidney, and rat kidney tissue lysates using FTL Antibody detects prominent bands at approximately 20-24 kDa in human brain, human lung, and human kidney samples, consistent with ferritin light chain / FTL. The observed expression profile supports detection of this intracellular iron storage protein in metabolically active tissues involved in iron sequestration, oxidative stress response, and cellular iron homeostasis pathways.




FTL Antibody A549 WB. Western blot analysis of A549 cell lysate using FTL Antibody detects a strong band at approximately 20-24 kDa, consistent with ferritin light chain / FTL. The observed signal supports expression of this intracellular iron storage protein in lung-derived epithelial tumor cells and is consistent with the role of FTL in ferritin complex assembly, cellular iron sequestration, and oxidative stress-associated metabolic regulation pathways.




FTL Antibody A431 WB. Western blot analysis of A431 cell lysate using FTL Antibody detects a strong band at approximately 20 kDa, consistent with ferritin light chain / FTL. The observed signal supports expression of this intracellular iron storage protein involved in iron sequestration, oxidative stress regulation, and ferritin complex-mediated cellular iron homeostasis pathways.

## Description

Mammalian ferritins consist of 24 subunits made up of 2 types of polypeptide chains, ferritin heavy chain and ferritin light chain. 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). Light chain ferritin is involved in cataracts by at least two mechanisms, hereditary hyper-ferritinemia cataract syndrome, in which light chain ferritin is overexpressed, and oxidative stress, an important factor in the development of ageing-related cataracts.

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 FTL antibody should be determined by the researcher.

## Immunogen

A portion of amino acids 38-165 from the human protein was used as the immunogen for the FTL antibody.

## Storage

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


Copyright © NSJ Bioreagents. All rights reserved.