

# Anti-Ferritin, Light Chain (FTL) (Microglia Marker) Antibody

Mouse Monoclonal Antibody Catalog # AH13251

#### **Product Information**

**Application** WB, IHC-P, IF, FC

**Primary Accession** P02792 Other Accession 433670 Reactivity Human Host Mouse Clonality Monoclonal Isotype Mouse / IgG2b **Clone Names** FTL/1386 **Calculated MW** 20020

#### Additional Information

Gene ID 2512

Other Names Ferritin L chain; Ferritin L subunit; Ferritin light chain; Ferritin light

polypeptide; FTL; LFTD; NBIA3

**Application Note** Flow Cytometry (0.1-0.2ug/million cells); Immunofluorescence (0.1-0.2ug/ml);

,Western Blotting (0.1-0.2ug/ml); ,Immunohistology (Formalin-fixed) (0.1-0.2ug/ml for 30 min at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application

should be determined.

**Format** 200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G.

Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available

WITHOUT BSA & azide at 1.0mg/ml.

**Storage** Store at 2 to 8°C.Antibody is stable for 24 months.

**Precautions** Anti-Ferritin, Light Chain (FTL) (Microglia Marker) Antibody is for research use

only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name FTL

**Function** Stores iron in a soluble, non-toxic, readily available form. Important for iron

homeostasis. Iron is taken up in the ferrous form and deposited as ferric hydroxides after oxidation. Also plays a role in delivery of iron to cells.

Mediates iron uptake in capsule cells of the developing kidney (By similarity). Delivery to lysosomes by the cargo receptor NCOA4 for autophagic degradation and release or iron (PubMed:24695223).

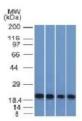
**Cellular Location** 

Cytoplasmic vesicle, autophagosome. Cytoplasm {ECO:0000250|UniProtKB:P29391}. Autolysosome {ECO:0000250|UniProtKB:P29391}

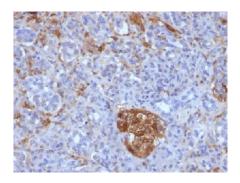
### **Background**

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 hyperferritinemia cataract syndrome, in which light chain ferritin is overexpressed, and oxidative stress, an important factor in the development of ageing-related cataracts.

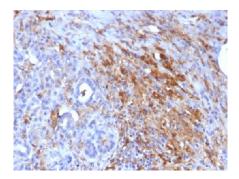
## **Images**



Western Blot of A431, HeLa, Liver and Testis Lysate using Ferritin, Light Chain Monoclonal Antibody (FTL/1386).



Formalin-fixed, paraffin-embedded Human Pancreas stained with Ferritin, Light Chain Monoclonal Antibody (FTL/1386).



Formalin-fixed, paraffin-embedded Human Pancreas stained with Ferritin, Light Chain Monoclonal Antibody (FTL/1386).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.