

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

Mouse Monoclonal Antibody Catalog # AH13253

#### **Specification**

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

Application IHC-P, IF, FC
Primary Accession P02792
Other Accession 433670
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype Mouse / IgG2a

Calculated MW 20020

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

#### **Gene ID 2512**

#### **Other Names**

Ferritin L chain; Ferritin L subunit; Ferritin light chain; Ferritin light polypeptide; FTL; LFTD; NBIA3

# **Application Note**

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \> <span class
="dilution IF">IF~~1:50~200</span><br \> <span class = "dilution FC">FC~~1:10~50</span>

#### **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.

#### Anti-Ferritin, Light Chain (FTL) (Microglia Marker) Antibody - 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:<a href="http://www.uniprot.org/citations/24695223" target="\_blank">24695223</a>).



#### **Cellular Location**

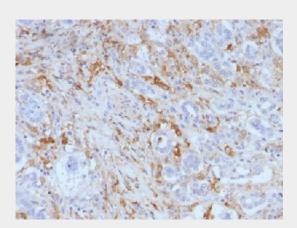
Cytoplasmic vesicle, autophagosome. Cytoplasm  $\{ECO:0000250|UniProtKB:P29391\}$ . Autolysosome  $\{ECO:0000250|UniProtKB:P29391\}$ 

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

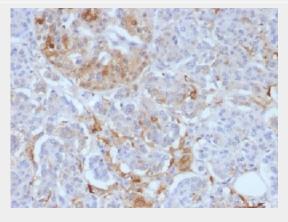
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

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



Formalin-fixed, paraffin-embedded Human Pancreas stained with Ferritin, Light Chain Monoclonal Antibody (FTL/1388).



Formalin-fixed, paraffin-embedded Human Pancreas stained with Ferritin, Light Chain Monoclonal Antibody (FTL/1388).

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