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

Mouse Monoclonal Antibody
Catalog # AH13253

Product Information

Application	IHC-P, IF, FC
Primary Accession	P02792
Other Accession	433670
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2a
Clone Names	FTL/1388
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); ,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

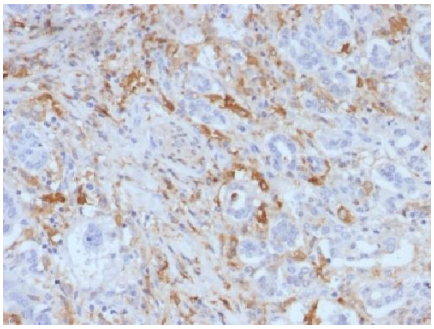
Name	FTL
Function	Stores iron in a soluble, non-toxic, readily available form. Important for iron homeostasis. Iron is taken up in the ferrous form and deposited as ferric hydroxides after oxidation. Also plays a role in delivery of iron to cells. Mediates iron uptake in capsule cells of the developing 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}

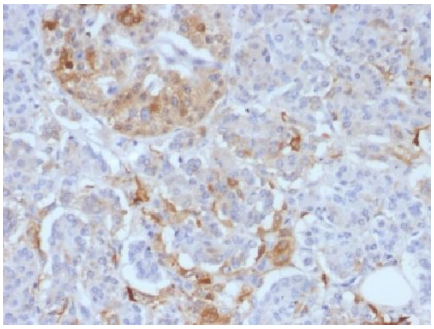
Background

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



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



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