



Rabbit Anti-Ferritin Light Chain antibody

SL6403R

Product Name:	Ferritin Light Chain
Chinese Name:	铁蛋白轻链抗体
Alias:	Ferritin light polypeptide; Ferritin L chain; Ferritin L subunit; Ferritin light chain; Ferritin light polypeptide like 3; FRIL; FRIL_HUMAN; FTL; L apoferritin; MGC71996; NBIA 3; NBIA3.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,
Applications:	ELISA=1:500-1000IHC-P=1:400-800 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	19-21kDa
Cellular localization:	cytoplasmicExtracellular matrixSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Ferritin Light Chain:101-175/175
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene encodes the light subunit of the ferritin protein. Ferritin is the major intracellular iron storage protein in prokaryotes and eukaryotes. It is composed of 24 subunits of the heavy and light ferritin chains. Variation in ferritin subunit composition may affect the rates of iron uptake and release in different tissues. A major function of ferritin is the storage of iron in a soluble and nontoxic state. Defects in this light chain

ferritin gene are associated with several neurodegenerative diseases and hyperferritinemia-cataract syndrome. This gene has multiple pseudogenes. [provided by RefSeq, Jul 2008].

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.

Subunit:

Oligomer of 24 subunits. There are two types of subunits: L (light) chain and H (heavy) chain. The major chain can be light or heavy, depending on the species and tissue type. The functional molecule forms a roughly spherical shell with a diameter of 12 nm and contains a central cavity into which the insoluble mineral iron core is deposited. Iron enters the spherical protein shell through pores that are formed between subunits. Mutations leading to truncation or the addition of extra residues at the C-terminus interfere with normal pore formation and with iron accumulation.

DISEASE:

Defects in FTL are the cause of hereditary hyperferritinemia-cataract syndrome (HHCS) [MIM:600886]. It is an autosomal dominant disease characterized by early-onset bilateral cataract. Affected patients have elevated level of circulating ferritin. HHCS is caused by mutations in the iron responsive element (IRE) of the FTL gene. Defects in FTL are the cause of neurodegeneration with brain iron accumulation type 3 (NBIA3) [MIM:606159]; also known as adult-onset basal ganglia disease. It is a movement disorder with heterogeneous presentations starting in the fourth to sixth decade. It is characterized by a variety of neurological signs including parkinsonism, ataxia, corticospinal signs, mild nonprogressive cognitive deficit and episodic psychosis. It is linked with decreased serum ferritin levels.

Similarity:

Belongs to the ferritin family.
Contains 1 ferritin-like diiron domain.

SWISS:

P02792

Gene ID:

2512

Database links:

[Entrez Gene: 2512](#)Human

[Entrez Gene: 14325](#)Mouse

[Entrez Gene: 29292](#)Rat

[Omim: 134790](#)Human

[SwissProt: P02792](#)Human

[SwissProt: P29391](#)Mouse

[SwissProt: P02793](#)Rat

[Unigene: 433670](#)Human

[Unigene: 713706](#)Human

[Unigene: 30357](#)Mouse

[Unigene: 431913](#)Mouse

[Unigene: 1905](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.