SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

[Primary Antibody]

Rabbit Anti-Ferritin Heavy Chain antibody

Catalog Number: SL8679R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	Ferritin Heavy Chain
Immunogen:	KLH conjugated synthetic peptide derived from human Ferritin Heavy Chain: 31-130/183
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	IHC-P=1:100-500 IHC-F=1:100-500 IF=1:100-500 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human(predicted:Mouse,Rat,Chicken,Dog,Cow,Horse,Rabbit,Sheep)
Predicted MW.:	21kDa
Subcellular Location:	The nucleus cytoplasmic Extracellular matrix
Background:	Mammalian ferritins consist of 24 subunits made up of two types of poly-peptide chains, ferritin heavy chain and ferritin light chain, which each have unique functions. Ferritin heavy chains catalyze the first step in iron storage, the oxidation of FeII, whereas ferritin light chains promote the nucleation of ferrihydrite, enabling storage of FeIII. The most prominent role of mamma-lian ferritins is to provide iron-buffering capacity to cells. In addition to iron buffering, heavy chain ferritin is also involved in the regulation of thymidine biosynthesis via increased expression of cytoplasmic serine hydroxymethyltransferase, which is a limiting factor in thymidylate synthesis in MCF-7 cells. 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

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

	factor in the development of aging-related cataracts. **Function:** Ferritin is a ubiquitous and highly conserved protein which plays a major role in iron homeostasis by sequestering and storing iron in a non-toxic and soluble form. It forms a holoenzyme of ~450 kDa, consisting of 24 subunits of two types, H (heavy; 21 kDa) and L (light; 19 kDa), and is capable of storing up to 4,500 atoms of ferric iron. Depending on the tissue type and physiological status of the cell, the ratio of H to L subunits in ferritin can vary widely. Ferritin is found in the liver, spleen, kidney and heart, with smaller amounts being found in blood. Serum ferritin levels serve as an indicator of the amount of iron stored in the body. Serum ferritin is the most sensitive test for anaemia, and is also used as a marker for restless leg syndrome, hemochromatosis and porphyria. As ferritin is an acute-phase reactant, it is often elevated during infection. Defects in ferritin proteins are associated with several neurodegenerative diseases. **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. **Subcellular Location:** Cytoplasmic. **Tissue Specificity:** In human liver the heavy chain is the major chain. **Similarity:** Belongs to the ferritin family. Contains 1 ferritin-like diiron domain. **Database links:** **Entrez Gene:** 654516 Cat **Entrez Gene:** 100499480 Dog **Entrez Gene:** 403631 Dog **Entrez Gene:** 2495 Human **Entrez Gene:** 14319 Mouse Omim: 134770 Human **SwissProt:** Q2MHN2 Cat **SwissProt:** Q95MP7 Dog **SwissProt:** P02794 Human **SwissProt:** P09528 Mouse **Unigene:** 524910 Human **Unigene:** 645560 Human **Unigene:** 1776 Mouse

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

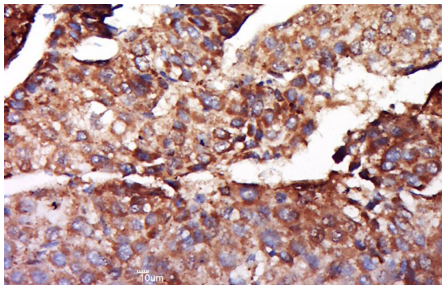
SunLong Biotech Co.,LTD

Tel: 0086-571-56623320 Fax:0086-571-56623318

E-mail:sales@sunlongbiotech.com

www.sunlongbiotech.com

[VALIDATION IMAGES]



Tissue/cell: human liver cancer; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-FHC Polyclonal Antibody, Unconjugated(SL8679R) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

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