

**Product Name:** Ferritin Heavy Chain Rabbit pAb

**Catalog #:** Z2872-20; Z2872-100

Also Known As: FHC; FTH; FTHL6; HFE5; PIG15; PLIF; Ferritin; FTH1

**Quantity:** 20 μl for Z2872-20; 100 μl for Z2872-100

**Concentration:** See labels on tube

Host Species: Rabbit Isotype: IgG

Reactivity: Human, Mouse, Rat

Immunogen: Recombinant fusion protein containing a sequence corresponding to amino acids 1-183 of

human Ferritin Heavy Chain.

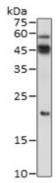
Swiss Prot. #: P02794
Calculated MW: 21KDa
Detected MW: 21KDa

**Applications:** WB (1:500 - 1:2,000)

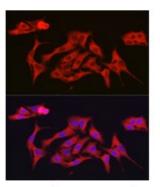
IHC (1:50 - 1:200) IF (1:50 - 1:200) IP (not tested)

Note: Antibody dilution should be optimized by users.

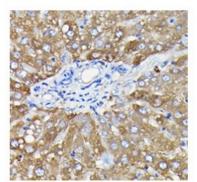
## Images:



Immunoblotting 25  $\mu$ g Mouse heart extracts using Ferritin Heavy Chain antibody (Z2872) at 1:1,000 dilution.



Immunofluorescence of A-549 cells using Ferritin Heavy Chain antibody (Z2872) at 1:100 dilution. Blue: DAPI nuclear staining.



Immunohistochemistry of paraffin-embedded rat liver using Ferritin Heavy Chain antibody (Z2872) at 1:100 dilution.





**Purification:** Protein A or G affinity purification

**Buffer:** PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

**Storage:** Store at -20°C. Centrifuge to maximize product recovery.

**Background:** Ferritin (FTH) 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 bioavailable form. The

assembled ferritin molecule, often referred to as a nanocage, can store up to 4,500 atoms of iron.

It forms a holoenzyme of ~450 kDa, consisting of 24 subunits made up of two types of

polypeptide chains: ferritin heavy chain and ferritin light chain, each having unique functions. 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). In addition to iron buffering, heavy chain ferritin also enhances thymidine biosynthesis. 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. The level of serum ferritin is markedly elevated in inflammation, malignancy, and iron

overload disorders.

Reference: 1. Hentze MW, et al. (1986) Proc Nat Acad Sci 83, 7226-7230.

2. Pham CG, et al. (2004) Cell 119, 529-542.

