

## Anti-Ferritin light chain Antibody (6N112)

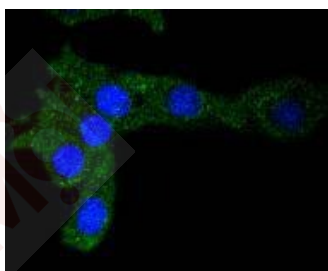
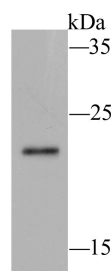
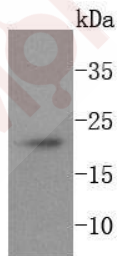
### Product Details

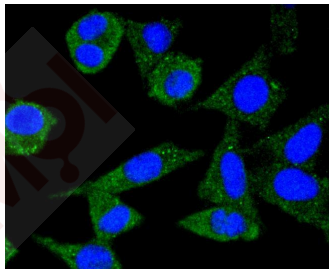
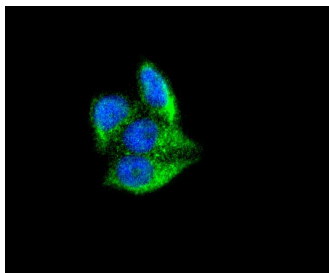
Ig Type:	IgG
Reactivity:	Human,Mouse,Rat,zebrafish
Conjugation:	Unconjugated
Molecular Weight:	Theoretical: 21 kDa.
Clone:	6N112
Purification:	ProA affinity purified

### Applications

#### Verified Activity:

1. Western blot analysis of Ferritin on zebrafish lysates using anti-Ferritin antibody at 1/1,000 dilution.
2. Western blot analysis of Ferritin on hybrid fish (crucian-carp) liver tissue lysate using anti-Ferritin antibody at 1/500 dilution.
3. ICC staining Ferritin in SHG-44 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
4. ICC staining Ferritin in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
5. ICC staining Ferritin in SH-SY-5Y cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.





Application: ICC/IF, WB  
Recommended WB: 1:500-1000; ICC/IF: 1:50-200

### Properties

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.  
Shipping: Shipping with blue ice.

### Antigen Details

Immunogen: Recombinant Protein  
Uniprot ID: P02792  
Synonyms: MGC71996; ferritin, light polypeptide; NBIA3; LFTD

### Research Background

Mammalian ferritins consist of 24 subunits made up of two types of polypeptide 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 Fe (II), whereas ferritin light chains promote the nucleation of ferrihydrite, enabling storage of Fe (III). The most prominent role of mammalian 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 factor in the development of ageing-related cataracts. The gene encoding human ferritin heavy chain maps to chromosome 11q13 and the human ferritin light chain gene maps to chromosome 19q13.3-q13.4.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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