

Ferritin Rabbit mAb

Catalog No: #48995

Package Size: #48995-1 50ul #48995-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

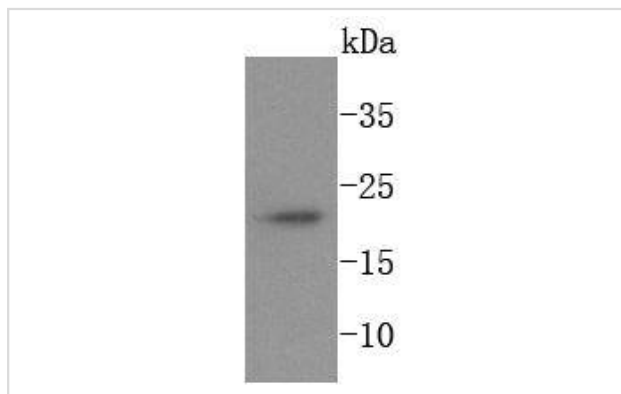
Description

Product Name	Ferritin Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SC0620
Purification	ProA affinity purified
Applications	WB, ICC/IF
Species Reactivity	Human;Mouse;Rat;Zebrafish
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	Cell proliferation-inducing gene 15 protein antibody Ferritin H subunit antibody Ferritin heavy chain antibody Ferritin heavy polypeptide 1 antibody Ferritin L subunit antibody Ferritin light polypeptide antibody Ferritin, heavy polypeptide antibody FRIH_HUMAN antibody FTH antibody FTH1 antibody FTL antibody
Accession No.	Swiss-Prot#:P02792
Calculated MW	21 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

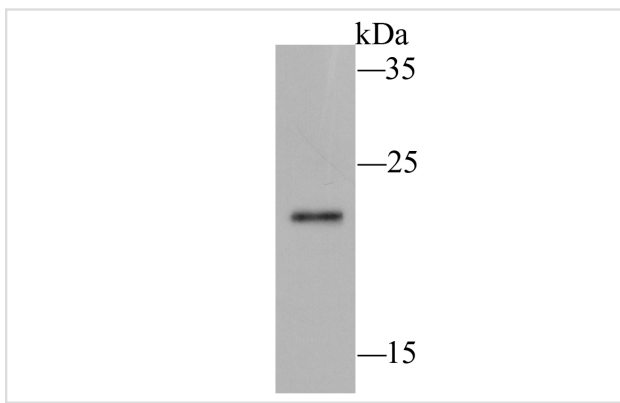
Application Details

WB: 1:500-1:1,000 ICC: 1:50-1:200

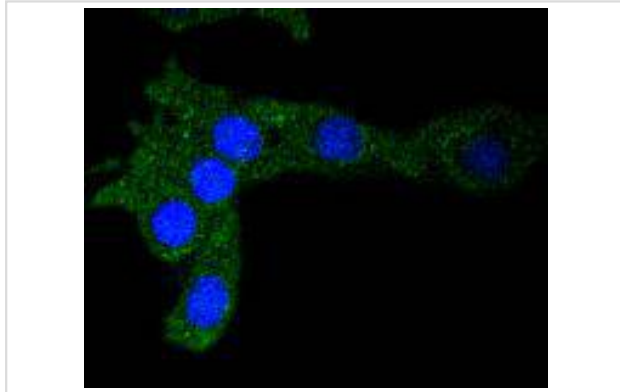
Images



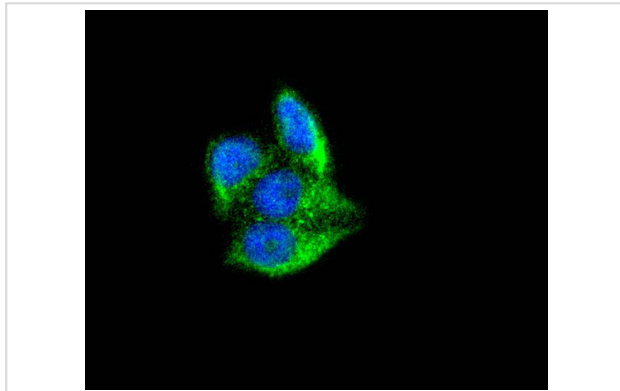
Western blot analysis of Ferritin on zebrafish lysates using anti-Ferritin antibody at 1/1,000 dilution.



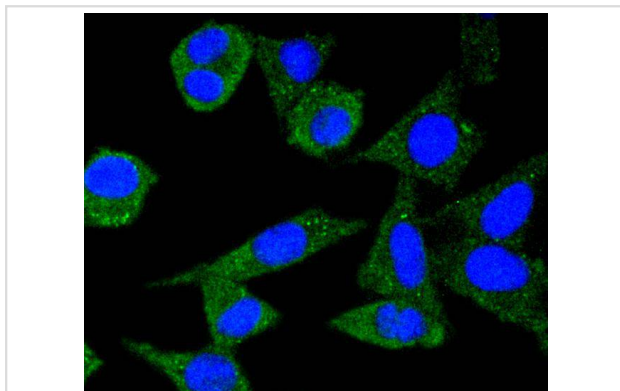
Western blot analysis of Ferritin on hybrid fish (crucian-carp) liver tissue lysate using anti-Ferritin antibody at 1/500 dilution.



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.



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.



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.

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.

References

1. Ben-Othman R et al. Leishmania-mediated inhibition of iron export promotes parasite replication in macrophages. PLoS Pathog 10:e1003901 (2014).
2. Chin D et al. Curcumin may impair iron status when fed to mice for six months. Redox Biol 2:563-9 (2014).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.