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Goat Anti-FTH1 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1446a

Specification

Goat Anti-FTH1 Antibody - Product Information

Application	**WB, E**
Primary Accession	P02794
Other Accession	NP_002023, 2495
Reactivity	**Human**
Predicted	**Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5mg/ml**
Isotype	**IgG**
Calculated MW	**21226**

Goat Anti-FTH1 Antibody - Additional Information

Gene ID 2495

Other Names
Ferritin heavy chain, Ferritin H subunit, 1.16.3.1, Cell proliferation-inducing gene 15 protein, Ferritin heavy chain, N-terminally processed, FTH1, FTH, FTHL6

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-FTH1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-FTH1 Antibody - Protein Information

Name FTH1

Synonyms FTH, FTHL6

Function
Stores iron in a soluble, non-toxic, readily available form. Important for iron homeostasis. Has ferroxidase activity (PubMed:9003196). Iron is taken up in the ferrous form and deposited as ferric hydroxides after oxidation (PubMed:9003196). Also plays a role in delivery of iron to cells (By similarity). Mediates iron uptake in capsule cells of the developing kidney (By similarity). Delivery to lysosomes is mediated by the cargo receptor NCOA4 for autophagic degradation and release of iron (PubMed:24695223, PubMed:26436293).

Cellular Location
Cytoplasm. Lysosome. Cytoplasmic vesicle, autophagosome

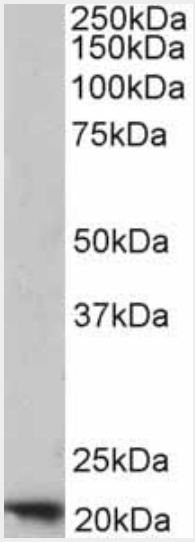
Tissue Location
Expressed in the liver.

Goat Anti-FTH1 Antibody - Protocols

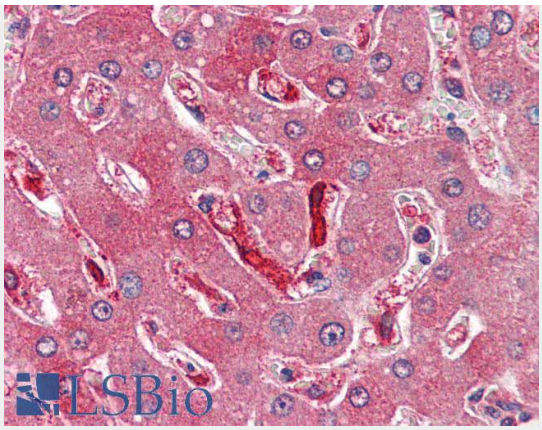
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

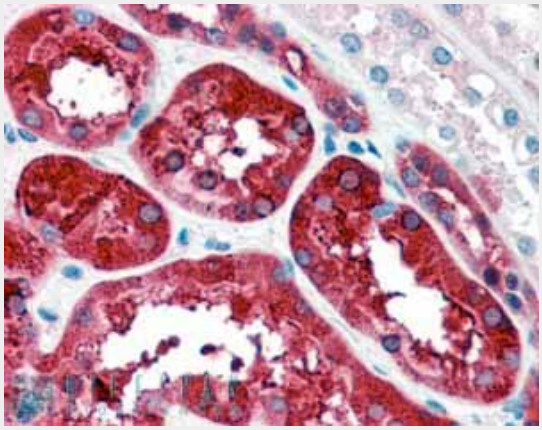
Goat Anti-FTH1 Antibody - Images



AF1446a (1 µg/ml) staining of Human Placenta lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF1446a (4 µg/ml) staining of paraffin embedded Human Liver. Steamed antigen retrieval with citrate buffer pH 6, AP-staining. This data was obtained using a previous batch.



AF1446a (4 µg/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, AP-staining. This data was obtained using a previous batch.

Goat Anti-FTH1 Antibody - Background

This gene encodes the heavy subunit of ferritin, 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 ferritin proteins are associated with several neurodegenerative diseases. This gene has multiple pseudogenes. Several alternatively spliced transcript variants have been observed, but their biological validity has not been determined.

Goat Anti-FTH1 Antibody - References

Binding and uptake of H-ferritin are mediated by human transferrin receptor-1. Li L, et al. Proc Natl Acad Sci U S A, 2010 Feb 23. PMID 20133674. Serum ferritin levels correlate with hypertensive retinopathy. Coban E, et al. Med Sci Monit, 2010 Feb. PMID 20110920. [Expression of FTL and FTH genes encoding ferretin subunits in lung and renal carcinomas] Kudriavtseva AV, et al. Mol Biol (Mosk), 2009 Nov-Dec. PMID 20088381. Deficiency of ferritin heavy-chain nuclear import in triple a syndrome implies nuclear oxidative damage as the primary disease mechanism. Storr HL, et al. Mol Endocrinol, 2009 Dec. PMID 19855093. Ferritin ferroxidase activity: a potent inhibitor of osteogenesis. Zarjou A, et al. J Bone Miner Res, 2010 Jan. PMID 19821764.