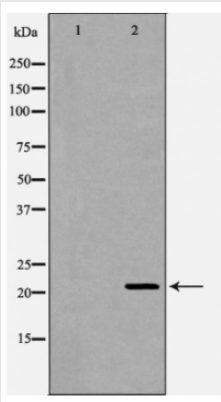
FTH1 Antibody

PRODUCT OVERVIEW

Product Name	FTH1, Antibody
Full Product Name	FTH1 Antibody
Product Gene Name	anti-FTH1 antibody
Product Synonym Names	FTH1; FHC; FTH; FTHL6; MGC104426; PIG15; PLIF
Species Reactivity	Human, Mouse, Rat
Form/Format	In phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purity/Purification	Immunogen affinity purified
Specificity	FTH1 Antibody detects endogenous levels of total FTH1
Preparation and Storage	Store at-20 degree C for 1 year
Molecular Weight	21kDa
OMIM	134770
3D Structure	ModBase 3D Structure for P02794
Immunogen	Recombinant protein of human FTH1
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-FTH1 antibody	Western Blot (WB), Immunohistochemistry (IHC)
Application Notes for anti-FTH1 antibody	WB: 1:500-1:2000 IHC: 1:50-1:200
Related Product Information for anti-FTH1 antibody	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 (1). The assembled ferritin molecule, often referred to as a nanocage, can store up to 4, 500 atoms of iron (2, 3). 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) (4). In addition to iron buffering, heavy chain ferritin also enhances thymidine biosynthesis (5). 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 (6). Research studies have found that defects in ferritin proteins are also associated with several neurodegenerative diseases (7).
Other Notes	Small volumes of anti-FTH1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for FTH1 purchase	MBS8516187 is an antibody targeting FTH1. Also known as FTH1 Antibody. Reactive in Human, Mouse, Rat.



Western Blot (WB) of anti-FTH1 antibody
Western blot analysis of extracts of variouscell lines, using FTH1 antibody.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for FTH1. It may not necessarily be applicable to this product.

NCBI GI #	56682959
NCBI GeneID	2495
NCBI Accession #	NP_002023.2
UniProt Primary Accession #	P02794
UniProt Secondary Accession #	Q3KRA8; Q3SWW1; B3KNR5
UniProt Related Accession #	P02794
GenBank Nucleotide #	NM_002032.2
NCBI Official Full Name	ferritin heavy chain
NCBI Official Synonym Full Names	ferritin heavy chain 1
NCBI Official Symbol	FTH1
NCBI Official Synonym Symbols	FHC; FTH; HFE5; PLIF; FTHL6; PIG15
UniProt Protein Name	Ferritin heavy chain
UniProt Synonym Protein Names	Cell proliferation-inducing gene 15 protein
Protein Family	Iron transporter
UniProt Gene Name	FTH1
UniProt Synonym Gene Names	FTH; FTHL6; Ferritin H subunit
NCBI Protein Information	ferritin heavy chain
NCBI Summary for FTH1	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. [provided by RefSeq, Jul 2008]
UniProt Comments for FTH1	Stores iron in a soluble, non-toxic, readily available form. Important for iron homeostasis. Has ferroxidase activity. Iron is taken up in the ferrous form and deposited as ferric hydroxides after oxidation. Also plays a role in delivery of iron to cells. Mediates iron uptake in capsule cells of the developing kidney ().

Research Articles on FTH1	**1.** Study demonstrate that the amounts of ferritin heavy subunit are inversely correlated, in K562 cells, to H19/miR-675 levels, and that this phenomenon may be largely attributed to the increase in ROS production induced by the FHC silencing.
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