

FTH1

Recombinant Human Ferritin Heavy Chain

Catalog No.	CS475A	Quantity:	5 µg
	CS475B		25 µg
	CS475C		1 mg

Alternate Names: Ferritin heavy chain, Ferritin H subunit, Cell proliferation-inducing gene 15 protein

Description: Ferritin is a fairly large, iron-storage heteropolymeric protein composed of 2 subunit types, light Ferritin & heavy Ferritin polypeptides, which is expressed in most kinds of cells and co-assemble in different proportion in a tissue-specific manner. Ferritin is composed of 24 self-assembled polypeptide subunits of the heavy and light ferritin chains and is characterized by the capacity to remove Fe (II) from solution in the presence of oxygen.

Ferritin heavy chain is a ferroxidase enzyme. A defect in the FTH1 gene causes hemochromatosis type 5.

Ferritin light polypeptide protein is the main intracellular iron storage protein in prokaryotes and eukaryotes. Variation in ferritin subunit composition influence the rates of iron uptake and release in various tissues. A key function of ferritin is the storage of iron in a soluble and nontoxic state. Defects in this light chain ferritin gene are associated with several neurodegenerative diseases and hyper ferritin anemia-cataract syndrome. Ferritin stores iron in a soluble, nontoxic, readily accessible form. Ferritin is needed for iron homeostasis. Iron is taken up in the ferrous form and deposited as ferric hydroxides after it has been oxidized.

UniProt ID: P02794

Gene ID: 2495

Source: *E. coli*

Molecular Mass: 21 kDa (183 aa) monomer

Formulation: 20 mM Tris-HCl, pH 7.5, 1 mM DTT, 10% glycerol.

Purity: > 95.0% as determined by SDS-PAGE.

Amino Acid Sequence: MTTASTSQVR QNYHQDSEAA INRQINLELY ASYVYLSMSY YFDRDDVALK
NFAKYFLHQS HEEREHAEKL MKLQNQRGGR IFLQDIKKPD CDDWESGLNA
MECALHLEKN VNQSLLELHK LATDKNDPHL CDFIETHYLN EQVKAIKELG
DHVTNLRKMG APESGLAEYL FDKHTLGDSD NES.

Storage & Stability: Store at 2-8°C for use within 2 weeks. Store unopened at -20°C to -80°C for up to 1 year. It is recommended to store at -20°C to -80°C in aliquots with added carrier protein (0.1% HSA or BSA). **Avoid repeated freeze-thaw cycles.**

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