



# Recombinant Protein Technical Manual

## Recombinant Human FTH Protein

RPES3650

### Product Data:

**Product SKU:** RPES3650

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** P02794

### Protein Information:

**Molecular Mass:** 21.2 kDa

**AP Molecular Mass:** 22 kDa

**Tag:**

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Ferritin heavy chain;FTH1;FTH;FTHL6;Ferritin H subunit;Cell proliferation-inducing gene 15 protein;FHC;HFE5;PIG15

## Immunogen Information:

**Sequence:** Met 1-Ser183

## Background:

Ferritin heavy polypeptide 1(FTH1), is a ubiquitous intracellular protein which stores iron in a soluble, non-toxic, readily available form. FTH1 has ferroxidase activity and is important for iron homeostasis. Iron is taken up in the ferrous form and deposited as ferric hydroxides after oxidation. Ferritin is composed of 24 subunits of the light and heavy ferritin chains. It plays a role in delivery of iron to cells and mediates iron uptake in capsule cells of the developing kidney. Variation of ferritin subunit composition may affect iron absorption and release in different tissues. Deficiency of ferritin proteins may cause several neurodegenerative diseases. Almost all living organisms can produce this protein, including algae, bacteria, higher plants, and animals.