



# Recombinant Protein Technical Manual

## Recombinant Human FTL Protein (His Tag)

RPES2029

### Product Data:

**Product SKU:** RPES2029

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** P02792

### Protein Information:

**Molecular Mass:** 24.5 kDa

**AP Molecular Mass:** 20-25 kDa

**Tag:** N-6His

**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 Tris,250mM NaCl,1mM EDTA,pH9.5.

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

**Application:**

**Synonyms:** Ferritin L subunit;Ferritin light chain; FTL

## Immunogen Information:

**Sequence:** Met 1-Asp175

## Background:

Ferritin is a large, iron-storage heteropolymeric protein, which is expressed in most kinds of cells and co-assemble in different proportion in a tissue-specific manner. Ferritin has oligomer of 24 subunits and two types of subunits including light chain (FTL) and heavy chain. Ferritin can remove Fe ( II ) from solution in the presence of oxygen and is very important for iron homeostasis. Iron is absorbed in the ferrous form and deposited as ferric hydroxides after oxidation. Iron is first oxidized to the ferric state for storage as ferric oxyhydroxide within the protein shell of ferritin. Thus, ferritin removes excess iron from the cell sap where it could otherwise participate in peroxidation mechanisms. Ferritin also plays a role in delivery of iron to cells and mediates iron uptake in capsule cells of the developing kidney.