# **Elabscience**®

## **Recombinant Human FTH Protein**

#### Catalog Number: PKSH032423

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Human
Source	E.coli-derived Human FTH protein Met 1-Ser183
Calculated MW	21.2 kDa
Observed MW	20 kDa
Accession	P02794
Bio-activity	Not validated for activity
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, 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 $< -20^{\circ}$ 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.
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants
	before lyophilization.
	Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

#### Data



> 95 % as determined by reducing SDS-PAGE.

### 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.