

Recombinant human Ferritin (Heavy & Light Chain), His

Catalog Number: bs-41193P

Concentration: >0.5 mg/ml

AA Seq: 1-183/183 & 1-175/183

Predicted MW: 19

Detected MW: 24-30 kDa

Tags: His

Activity: Not tested

Endotoxin: Not analyzed

Purity: >95% as determined by SDS-PAGE

Purification: AC

Form: Lyophilized or Liquid

Storage: 20mM Tris-HCl (pH8.0) with 150mM NaCl.

Stored at -70°C or -20°C. Avoid repeated freeze/thaw cycles.

Background: Mammalian ferritins consist of 24 subunits made up of two types of poly-peptide chains, ferritin heavy chain and ferritin light chain, which each have unique functions. Ferritin heavy chains catalyze the first step in iron storage, the oxidation of FeII, whereas ferritin light chains promote the nucleation of ferrihydrite, enabling storage of FeIII. The most prominent role of mammalian ferritins is to provide iron-buffering capacity to cells. In addition to iron buffering, heavy chain ferritin is also involved in the regulation of thymidine biosynthesis via increased expression of cytoplasmic serine hydroxymethyltransferase, which is a limiting factor in thymidylate synthesis in MCF-7 cells. Light chain ferritin is involved in cataracts by at least two mechanisms: hereditary hyperferritinemia cataract syndrome, in which light chain ferritin is overexpressed; and oxidative stress, an important factor in the development of aging-related cataracts.

VALIDATION IMAGES



The purity of the protein is greater than 90% as determined by reducing SDS-PAGE.