



#24300

**Catalog Number:** 24300-1, 24300-2

**Amount:** 50µg/50µl, 100µg/100µl

**Swiss-Prot No. :** P02794

**Form of Antibody:** Rabbit IgG in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

**Storage/Stability:** Store at -20°C/1 year

**Immunogen:** The antiserum was produced against synthesized peptide derived from Human FTH1

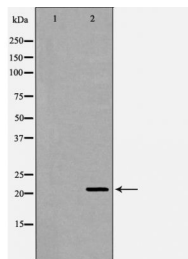
**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

**Specificity/Sensitivity:** FTH1 Antibody detects endogenous levels of total FTH1

**Reactivity:** Human, Mouse, Rat

**Applications:**

Predicted MW: 21kd    WB: 1:500-2000    IHC: 1:50-200



Western blot analysis of extracts of various cell lines, using FTH1 antibody.

**Background :** Ferritin (FTH) is a ubiquitous and highly conserved protein which plays a major role in iron homeostasis by sequestering and storing iron in a non-toxic and bioavailable form . The assembled ferritin molecule, often referred to as a nanocage, can store up to 4,500 atoms of iron . It forms a holoenzyme of ~450 kDa, consisting of 24 subunits made up of two types of polypeptide chains: ferritin heavy chain and ferritin light chain, each having unique functions. Ferritin heavy chains catalyze the first step in iron storage, the oxidation of Fe(II), whereas ferritin light chains promote the nucleation of ferrihydrite, enabling storage of Fe(III) . In addition to iron buffering, heavy chain ferritin also enhances thymidine biosynthesis . Serum ferritin levels serve as an indicator of the amount of iron stored in the body. Serum ferritin is the most sensitive test for anaemia. The level of serum ferritin is markedly elevated in inflammation, malignancy, and iron overload disorders. Research studies have found that defects in ferritin proteins are also associated with several neurodegenerative diseases .