

36-2337: Anti-Ferritin, Heavy Chain (FTH) (Microglia Marker) Monoclonal Antibody(Clone: FTH/2081)

Clonality :	Monoclonal
Clone Name :	FTH/2081
Application :	WB,IHC
Reactivity :	Human
Gene :	FTH1
Gene ID :	2495
Uniprot ID :	P02794
Alternative Name :	Apoferitin; Cell proliferation-inducing gene 15 protein; Ferritin H subunit; Ferritin heavy chain; FHC; FRIH; FTH1; FTHL6; Iron overload autosomal dominant; PIG15; Placenta immunoregulatory factor; Proliferation inducing gene 15 protein (PLIF)
Isotype :	Mouse IgG2c, kappa
Immunogen Information :	Recombinant human FTH1 protein fragment (around aa 58-180) (exact sequence is proprietary)

Description

Mammalian ferritins consist of 24 subunits made up of 2 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 Fe(II), whereas ferritin light chains promote the nucleation of ferrihydrite, enabling storage of Fe(III). 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.

Product Info

Amount :	20 µg / 100 µg
Content :	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage condition :	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

Application Note

Western Blot (1-2ug/ml); Immunohistochemistry (Formalin-fixed) (0.1-0.2ug/ml for 30 min at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes);

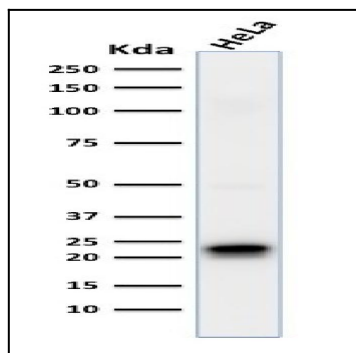


Fig. 1: Western Blot of HeLa, cell lysate using Ferritin, Heavy Chain Mouse Monoclonal Antibody (FTH/2081).

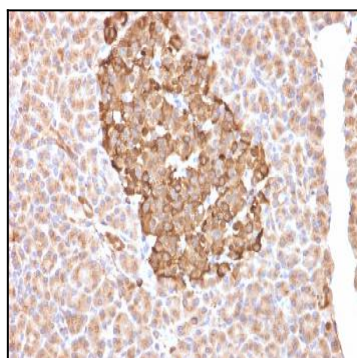


Fig. 2: Formalin-fixed, paraffin-embedded human pancreas stained with Ferritin, Heavy Chain Mouse Monoclonal Antibody (FTH/2081). Confirmation of Purity and Integrity of Antibody.

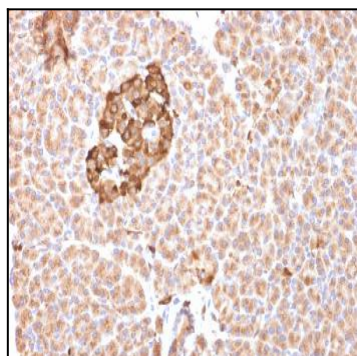


Fig. 3: Formalin-fixed, paraffin-embedded human pancreas stained with Ferritin, Heavy Chain Mouse Monoclonal Antibody (FTH/2081). Confirmation of Purity and Integrity of Antibody.

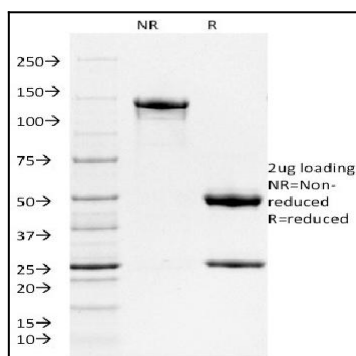


Fig. 4: SDS-PAGE Analysis Purified Ferritin, Heavy Chain Mouse Monoclonal Antibody (FTH/2081). Confirmation of Purity and Integrity of Antibody.