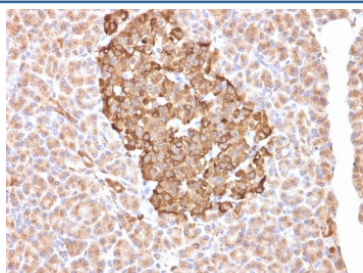


FTH1 Antibody / Ferritin heavy chain [clone FTH/2081] (V7791)

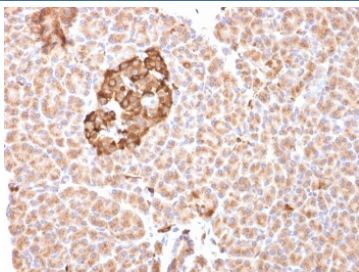
Catalog No.	Formulation	Size
V7791-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7791-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7791SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

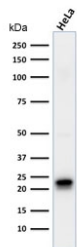
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2c, kappa
Clone Name	FTH/2081
Purity	Protein G affinity chromatography
UniProt	P02794
Localization	Cytoplasmic
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 0.1-0.2ug/ml
Limitations	This FTH1 antibody is available for research use only.



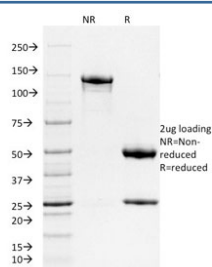
IHC staining of FFPE human pancreas with FTH1 antibody (clone FTH/2081). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



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Western blot testing of human HeLa cell lysate with FTH1 antibody (clone FTH/2081). Predicted molecular weight ~21 kDa.



SDS-PAGE analysis of purified, BSA-free FTH1 antibody (clone FTH/2081) as confirmation of integrity and purity.

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.

Application Notes

Optimal dilution of the FTH1 antibody should be determined by the researcher.

Immunogen

A human recombinant partial protein (amino acids 58-180) were used as the immunogen for the FTH1 antibody.

Storage

Store the FTH1 antibody at 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).

