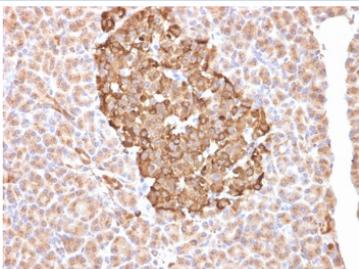


## FTH1 Antibody / Ferritin heavy chain [clone FTH/2081] (V7791)

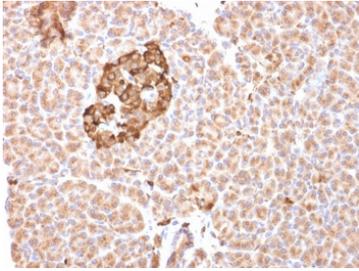
Catalog No.	Formulation	Size
V7791-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7791-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7791SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

### Bulk quote request

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



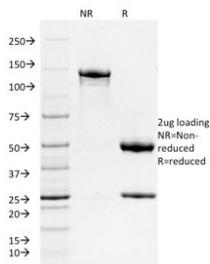
IHC staining of FFPE human pancreas with FTH1 antibody (clone FTH/2081). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



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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).

