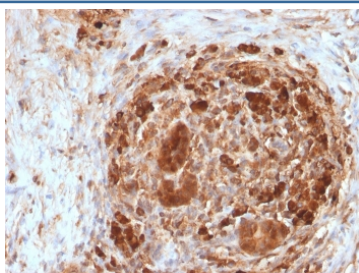


FTH Antibody / Ferritin heavy chain [clone FTH/2082] (V8509)

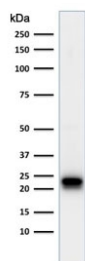
Catalog No.	Formulation	Size
V8509-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8509-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8509SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

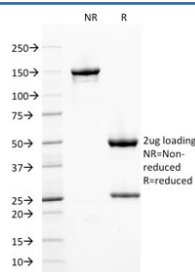
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2c, kappa
Clone Name	FTH/2082
Purity	Protein G affinity chromatography
UniProt	P02794
Localization	Cytoplasmic
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT
Limitations	This FTH antibody is available for research use only.



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



Western blot testing of human HeLa cell lysate with FTH antibody. Predicted molecular weight: ~21 kDa.



SDS-PAGE analysis of purified, BSA-free FTH antibody 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 FTH antibody should be determined by the researcher.

Immunogen

A portion of amino acids 58-180 from the human protein was used as the immunogen for the FTH antibody.

Storage

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