

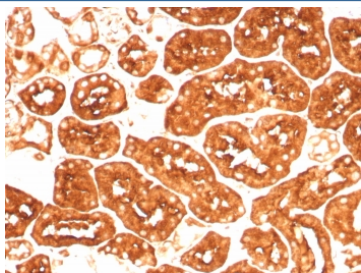
Recombinant Ferritin Heavy Chain Antibody / FTH1 [clone FTH/8700R] (V4170)

Catalog No.	Formulation	Size
V4170-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4170-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4170SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

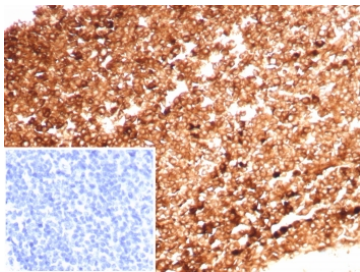
Recombinant **RABBIT MONOCLONAL**

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Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	FTH/8700R
Purity	Protein A/G affinity
UniProt	P02794
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT
Limitations	This recombinant Ferritin Heavy Chain antibody is available for research use only.



IHC staining of FFPE human kidney tissue with recombinant Ferritin Heavy Chain antibody (clone FTH/8700R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human tonsil tissue with recombinant Ferritin Heavy Chain antibody (clone FTH/8700R). Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

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 recombinant Ferritin Heavy Chain antibody should be determined by the researcher.

Immunogen

A recombinant human FTH1 protein fragment (within amino acids 58-180) was used as the immunogen for the recombinant Ferritin Heavy Chain antibody.

Storage

Aliquot the recombinant Ferritin Heavy Chain antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.