

For Research Use Only

Ferritin heavy chain Recombinant monoclonal antibody

Catalog Number: 83428-1-RR

Featured Product

7 Publications



Basic Information

Catalog Number:

83428-1-RR

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG2290

GenBank Accession Number:

BC000857

GeneID (NCBI):

2495

UNIPROT ID:

P02794

Full Name:

ferritin, heavy polypeptide 1

Calculated MW:

183 aa, 21 kDa

Observed MW:

21 kDa

Purification Method:

Protein A purification

CloneNo.:

230312F3

Recommended Dilutions:

WB: 1:500-1:2000

IF/ICC: 1:200-1:800

Applications

Tested Applications:

WB, IF/ICC, ELISA

Cited Applications:

WB

Species Specificity:

human

Cited Species:

human, mouse, rat

Positive Controls:

WB : HeLa cells, human liver tissue, human placenta tissue

IF/ICC : HeLa cells,

Background Information

Ferritin heavy chain(FTH1, ferritin, heavy polypeptide 1), as a 21 kDa subunit of the ferritin complex, exhibits ferroxidase activity, which serves an essential role in catalyzing the conversion of the ferrous ions (Fe^{2+}) to the ferric form (Fe^{3+}). FTH1 regulates angiogenesis during inflammation and malignancy by binding to high molecular weight kininogen (HKA) and blocking its anti-angiogenic activity on endothelial cells in vitro and in vivo(PMID: 33260500). FTH1 has been shown to protect proximal tube epithelial cells and kidneys against the activity of free iron in reactive oxygen species generation. FTH1 plays an important role in the maintenance of the cellular iron balance in ferroptosis.

Notable Publications

Author	Pubmed ID	Journal	Application
Qiushuang Zhang	40431724	Viruses	WB
Zhaojie Yang	40328750	Cell Death Dis	WB
Tao Wang	40195331	Cell Death Dis	WB

Storage

Storage:

Store at -20°C . Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

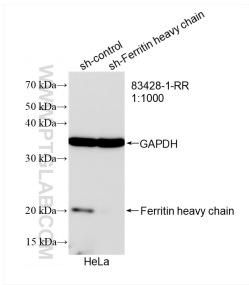
T: 4006900926

E: Proteintech-CN@ptglab.com

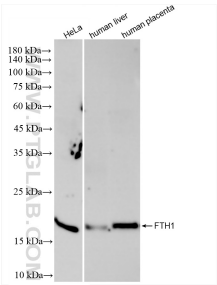
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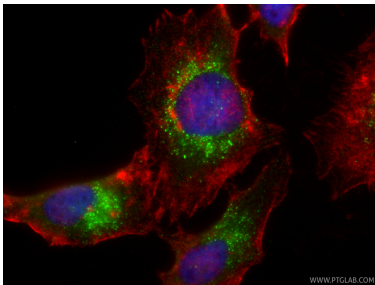
Selected Validation Data



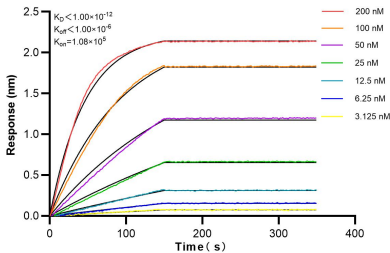
WB result of Ferritin heavy chain antibody (83428-1-RR; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Ferritin heavy chain transfected HeLa cells.



Various lysates were subjected to SDS PAGE followed by western blot with 83428-1-RR (Ferritin heavy chain antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using Ferritin heavy chain antibody (83428-1-RR, Clone: 230312F3) at dilution of 1:400 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).



Biolayer interferometry (BLI) kinetic assays of 83428-1-RR against Human FTH1 were performed. The affinity constant is below 1 pM.