

For Research Use Only

# Ferritin heavy chain Recombinant monoclonal antibody, PBS Only

Catalog Number: 83428-1-PBS

Featured Product



## Basic Information

Catalog Number:

83428-1-PBS

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

## Applications

Tested Applications:

WB, IF/ICC, ELISA

Species Specificity:

human

## 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 ( $\text{Fe}^{2+}$ ) to the ferric form ( $\text{Fe}^{3+}$ ). 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.

## Storage

Storage:

Store at  $-80^{\circ}\text{C}$ .

The product is shipped with ice packs. Upon receipt, store it immediately at  $-80^{\circ}\text{C}$

Storage Buffer:

PBS only, pH7.3

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

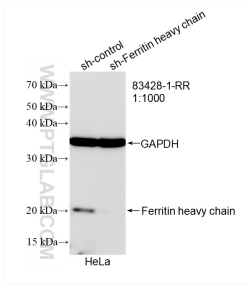
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

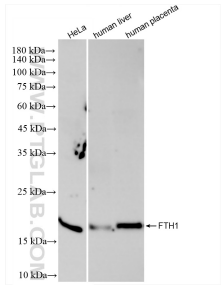
W: [ptgcn.com](http://ptgcn.com)

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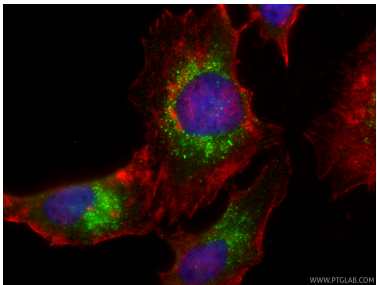
## Selected Validation Data



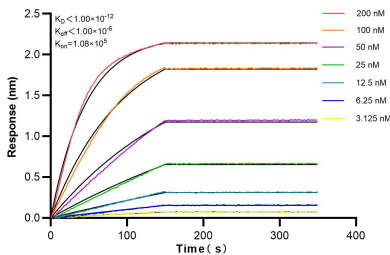
WB result of Ferritin heavy chain antibody (83428-1-RR; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Ferritin heavy chain transfected HeLa cells. This data was developed using the same antibody clone with 83428-1-PBS in a different storage buffer formulation.



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. This data was developed using the same antibody clone with 83428-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 83428-1-PBS in a different storage buffer formulation.



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