

For Research Use Only

# Ferritin heavy chain Recombinant antibody

Catalog Number: 83428-1-RR

Featured Product

4 Publications



## Basic Information

<b>Catalog Number:</b> 83428-1-RR	<b>GenBank Accession Number:</b> BC000857	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 2495	<b>CloneNo.:</b> 230312F3
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P02794	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IF/ICC 1:50-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> ferritin, heavy polypeptide 1	
<b>Immunogen Catalog Number:</b> AG2290	<b>Calculated MW:</b> 183 aa, 21 kDa	
	<b>Observed MW:</b> 21 kDa	

## Applications

<b>Tested Applications:</b> WB, IF/ICC, ELISA	<b>Positive Controls:</b> WB : HeLa cells, human liver tissue, human placenta tissue IF/ICC : HeLa cells,
<b>Cited Applications:</b> WB	
<b>Species Specificity:</b> human	
<b>Cited Species:</b> human, rat	

## 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<sup>2+</sup>) to the ferric form (Fe<sup>3+</sup>). 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
Gizzy Keeler	39594692	Cancers (Basel)	WB
Pin Fang	39368783	Eur J Pharm Sci	WB

## Storage

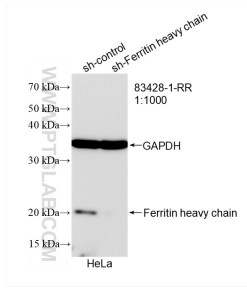
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

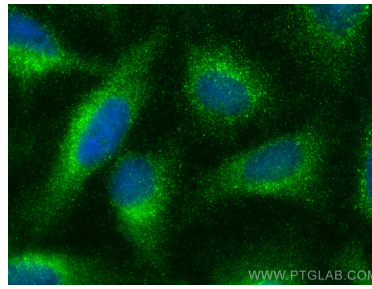
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

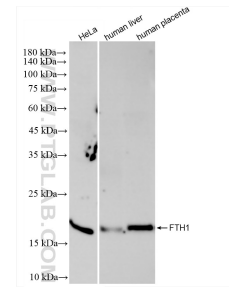
## Selected Validation Data



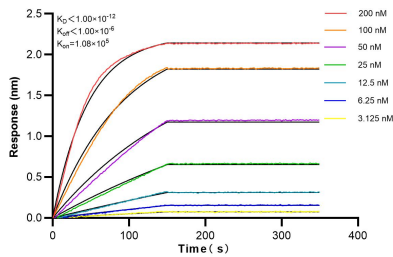
WB result of Ferritin heavy chain antibody (83428-1-RR; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Ferritin heavy chain transfected HeLa cells.



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using Ferritin heavy chain antibody (83428-1-RR, Clone: 230312F3 ) at dilution of 1:200 and Multi-rAb Coralite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).



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.



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