

Ferritin heavy chain Polyclonal antibody

Catalog Number: 11682-1-AP

Featured Product

30 Publications

Basic Information

Catalog Number:

11682-1-AP

Size:

150ul, Concentration: 600 ug/ml by Nanodrop;

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:

Antigen affinity purification

Recommended Dilutions:

WB: 1:2000-1:6000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF/ICC: 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

Cited Applications:

WB, IHC, IF, IP, CoIP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, bovine, sheep

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: HeLa cells, L02 cells, human placenta tissue, mouse liver tissue, rat liver tissue

IP: HeLa cells,

IHC: mouse liver 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 (Fe²⁺) to the ferric form (Fe³⁺). 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
Jiaqi Hu	40112136	J Proteome Res	WB, IP
KeJing Zhang	40022222	J Transl Med	IHC
You Li	39984770	Inflammation	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

*** 20ul sizes contain 0.1% BSA

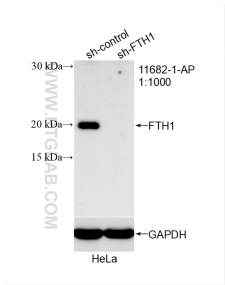
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

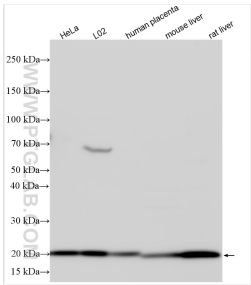
E: proteintech@ptglab.com
W: ptglab.com

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

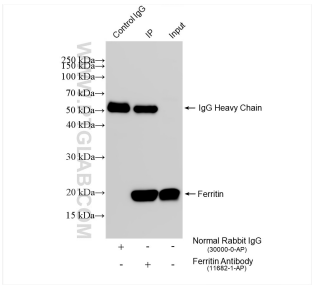
Selected Validation Data



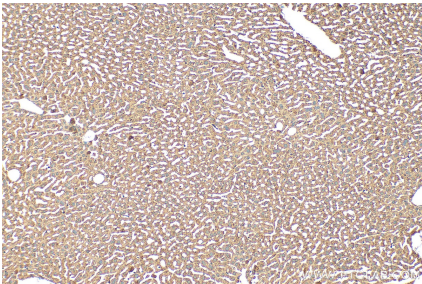
WB result of Ferritin heavy chain antibody (11682-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Ferritin heavy chain transfected HeLa cells.



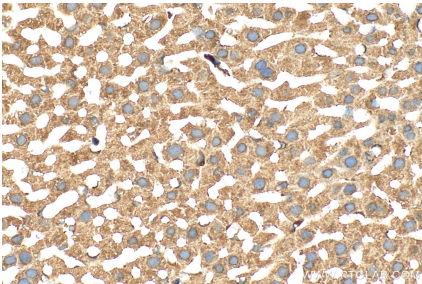
Various lysates were subjected to SDS PAGE followed by western blot with 11682-1-AP (Ferritin heavy chain antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



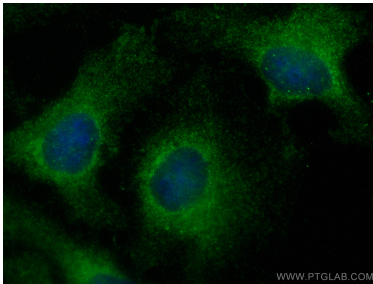
IP result of anti-Ferritin heavy chain (IP:11682-1-AP, 4ug; Detection:11682-1-AP 1:3000) with HeLa cells lysate 1600 ug.



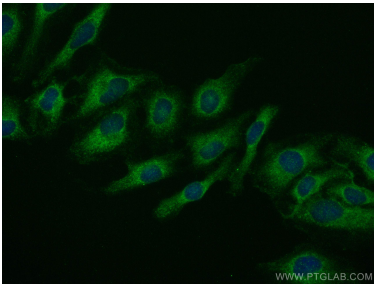
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 11682-1-AP (Ferritin heavy chain antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 11682-1-AP (Ferritin heavy chain antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using Ferritin heavy chain antibody (11682-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using Ferritin heavy chain antibody (11682-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).