



## Ferritin Heavy Chain Recombinant Rabbit mAb

Catalog Number: bsm-54108R

Target Protein: Ferritin Heavy Chain

Concentration: 1mg/ml

Form: Liquid Host: Rabbit

Clonality: Recombinant

Clone No.: 5B5 Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500)

Reactivity: Human
Predicted MW: 20 kDa

Subcellular Cytoplasm, Nucleus

Locations:

Entrez Gene: 2495 Swiss Prot: P02794

Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

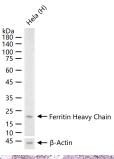
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: Mammalian ferritins consist of 24 subunits made up of two 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 FeII, whereas ferritin light chains promote the nucleation of ferrihydrite, enabling storage of FeIII. The most prominent role of mamma-lian 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.

## **VALIDATION IMAGES**



25 ug total protein per lane of various lysates (see on figure) probed with Ferritin Heavy Chain monoclonal antibody, unconjugated (bsm-54108R) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



Paraformaldehyde-fixed, paraffin embedded Human Lung Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation Ferritin Heavy Chain Monoclonal Antibody, Unconjugated (bsm-54108R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



Paraformaldehyde-fixed, paraffin embedded Human Liver Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation Ferritin Heavy Chain Monoclonal Antibody, Unconjugated (bsm-54108R) at 1:200 overnight at  $4^{\circ}$ C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



Paraformaldehyde-fixed, paraffin embedded Human Prostate Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation Ferritin Heavy Chain Monoclonal Antibody, Unconjugated (bsm-54108R) at 1:200 overnight at  $4^{\circ}$ C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



Paraformaldehyde-fixed, paraffin embedded Human Breast Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation Ferritin Heavy Chain Monoclonal Antibody, Unconjugated (bsm-54108R) at 1:200 overnight at  $4^{\circ}$ C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



Paraformaldehyde-fixed, paraffin embedded Human Lung; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation Ferritin Heavy Chain Monoclonal Antibody, Unconjugated (bsm-54108R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.

## PRODUCT SPECIFIC PUBLICATIONS

[IF=7.9] Yu-Sheng Shi. et al. Dendrobine rescues cognitive dysfunction in diabetic encephalopathy by inhibiting ferroptosis via activating Nrf2/GPX4 axis. PHYTOMEDICINE. 2023 Jul;:154993 WB; Mouse. 37567006

[IF=4.8] Haoqiang Chen. et al. IFIT2 mediates iron retention and cholesterol efflux in atherosclerosis. INT IMMUNOPHARMACOL. 2024 Dec;142:113131 WB,IF; Mouse . 39276454

[IF=1.5] Zhiyu Zhao. et al.miRNA-541-5p regulates myocardial ischemia–reperfusion injury by targeting ferroptosis. JOURNAL OF CARDIOTHORACIC SURGERY. 2025 Jan 15;20(1):63. Western blot; . 39815273