

## Ferritin, Heavy Chain (FTH) (Microglia Marker) Antibody

Mouse Monoclonal Antibody [Clone FTH/2082]

Catalog No	Format	Size
2495-MSM2-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
2495-MSM2-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
2495-MSM2-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

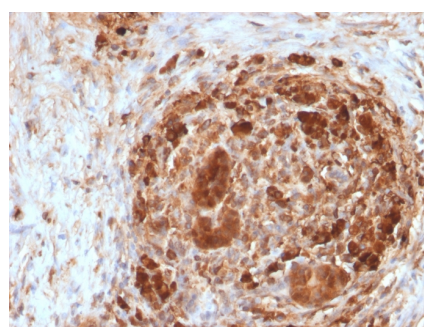
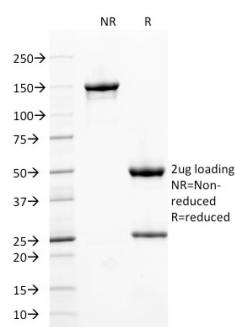
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

### Product Details

<b>Clone</b>	FTH/2082
<b>Gene Name</b>	FTH1
<b>Immunogen</b>	Recombinant human FTH1 protein fragment (around aa 58-180) (exact sequence is proprietary)
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG2c / Kappa
<b>Mol. Weight of Antigen</b>	21kDa
<b>Species Reactivity</b>	Human, Rat
<b>Positive Control</b>	Human liver tissue. Liver tissue lysate, Brain, A-549, A-431, Human Brain, Rat Brain, Human Kidney, Rat Kidney

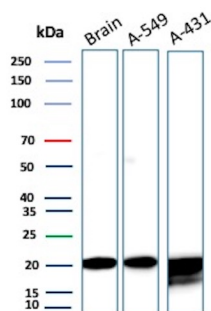
*\*Optimal dilution for a specific application should be determined.*

### Product Images for Ferritin, Heavy Chain (FTH) (Microglia Marker) Antibody

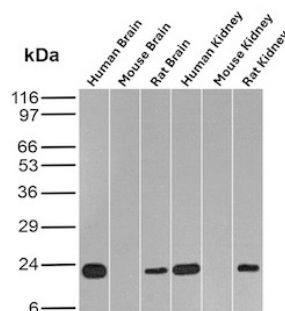


SDS-PAGE Analysis of Purified Ferritin, Heavy Chain Mouse Monoclonal Antibody (FTH/2082). Confirmation of Purity and Integrity of Antibody.

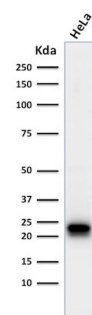
Formalin-fixed, paraffin-embedded human pancreas stained with Ferritin, Heavy Chain Mouse Monoclonal Antibody (FTH/2082). HIER: Tris/EDTA, pH9.0, 45min. 2: HRP-polymer, 30min. DAB, 5min.



Western Blot Analysis of Human Brain, A-549 and A-431 lysate using Ferritin Heavy Chain Mouse Monoclonal Antibody (FTH/2082).



Western Blot Analysis of Human Brain, Mouse Brain, Rat Brain, Human Kidney, Mouse Kidney and Rat Kidney tissue lysates using Ferritin Heavy Chain Mouse Monoclonal Antibody (FTH/2082).



Western blot analysis of HeLa cell lysate using Ferritin Heavy Chain Rabbit Monoclonal Antibody (FTH/2082).

### Specificity & Comments

Mammalian ferritins consist of 24 subunits made up of 2 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  $Fe(II)$ , whereas ferritin light chains promote the nucleation of ferrihydrite, enabling storage of  $Fe(III)$ . The most prominent role of mammalian 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.

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

### Research Areas

Cardiovascular, Immunology