



## RayBiotech, Inc.

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### Certificate of Analysis and Data Sheet Rabbit anti- Ferritin antibody

<b>Catalog No.</b> 130-10047	<b>Isotype:</b> Rabbit Ig G	<b>Speceis:</b> Human	<b>Accession No:</b> P02794
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#### Description

Ferritin is a protein of 450 kDa consisting of 24 subunits that is present in every cell type. In vertebrates, these subunits are both the light (L) and the heavy (H) type with an apparent molecular weight of 19 kDa or 21 kDa respectively; their sequences are about 50% homologous. Ferritin concentrations increase drastically in the presence of an infection or cancer; this is necessary to counter the infective agent's attempt to bind iron from the host's tissue. The inflammatory response may cause ferritin to migrate from the plasma to within cells, in order to deny iron to the infective agent. Serum ferritin levels are measured in patients as part of the iron studies workup for anemia and for restless legs syndrome. The ferritin levels measured usually have a direct correlation with the total amount of iron stored in the body. However, ferritin levels may be artificially high in cases of anemia of chronic disease where ferritin is elevated in its capacity as an acute phase protein and not as a marker for iron overload.

#### Applications

Table Summary of antibody applications and working conditions

Options / Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	*			1:20000 (at least detecting 50 ng/ml)
Western Blotting			*	
Enzyme Immunoassay (EIA)			*	
Immunohistology - paraffin			*	
Immunohistology - resin			*	
Immunoprecipitation			*	
Flow Cytometry			*	
Neutralization			*	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.

**The products are furnished for LABORATORY RESEARCH USE ONLY.  
Not for diagnostic or therapeutic use.**



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### **Preparation**

Immunogen was synthetic peptide derived from human Ferritin. This antibody was produced from a rabbit immunized with the immunogen. The IgG fraction was purified from rabbit serum by ammonium sulphate precipitation, and followed by Protein A/G affinity chromatography.

### **Binding Activity**

The antibody can specifically bind to its immunogen, and did not show any cross reactivity with unrelated antigens in ELISA. The specificity for binding to recombinant protein, cellular protein and native antigen is not defined. Cross reactivity with mouse and rat Ferritin was not tested yet.

### **Reconstitution**

Supplied as lyophilized and purified antibody originally containing PBS, without **Preservative Stabilizers**, liking Sodium Azide. *It final concentration is indicated in shipping vial.*

The antibody is stable for at least years from the data of receipt when stored at  $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$ . Reconstituted antibody (suggesting with sterile PBS) can also be aliquotted and stored frozen at  $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$  in a manual defrost freezer for months without detectable loss activity. Upon reconstitution, the antibody can also be stored over months at  $4^{\circ}\text{C}$ . **Please avoid freeze-thaw cycles.**

### **Storage**

Keep it at  $4^{\circ}\text{C}$  if intended for use within a month. Store at  $-20^{\circ}\text{C}$  if over months. **Minimize freezing and thawing when use.**

### **Related products**

- 1 Goat Anti-Human Ferritin (cat# DS-PB-00763)
- 2 Rabbit Anti-Human Ferritin (cat# DS-PB-00762)

### **Reference**

Eshed I, et al..(2001) Plasma ferritin and type 2 diabetes mellitus: a critical review. Endocr Res. 27(1-2):91-7.

Nelson RL. (2001) Iron and colorectal cancer risk: human studies. Nutr Rev. 59(5):140-8.

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