

### Ceruloplasmin Antibody

Rabbit mAb Catalog # AP93166

### **Specification**

### **Ceruloplasmin Antibody - Product Information**

Application WB
Primary Accession P00450
Reactivity Rat

Clonality Monoclonal

**Other Names** 

Ceruloplasmin; CP2; Ferroxidase;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 122205 Da

# **Ceruloplasmin Antibody - Additional Information**

Dilution WB~~1:1000

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

Ceruloplasmin

Description Ceruloplasmin is a blue, copper-binding

(6-7 atoms per molecule) glycoprotein. It has ferroxidase activity oxidizing Fe(2+) to Fe(3+) without releasing radical oxygen species. It is involved in iron transport

across the cell membrane.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

## **Ceruloplasmin Antibody - Protein Information**

Name CP (HGNC:2295)

### **Function**

Multifunctional blue, copper-binding (6-7 atoms per molecule) glycoprotein. It has ferroxidase activity oxidizing Fe(2+) to Fe(3+) without releasing radical oxygen species. It is involved in iron transport across the cell membrane (PubMed:<a

href="http://www.uniprot.org/citations/16150804" target="\_blank">16150804</a>). Copper ions provide a large number of enzymatic activites. Oxidizes highly toxic ferrous ions to the ferric state for further incorporation onto apo- transferrins, catalyzes Cu(+) oxidation and promotes the oxidation of biogenic amines such as norepinephrin and serotonin (PubMed:<a

href="http://www.uniprot.org/citations/14623105" target="\_blank">14623105</a>, PubMed:<a href="http://www.uniprot.org/citations/4643313" target="\_blank">4643313</a>, PubMed:<a



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href="http://www.uniprot.org/citations/5912351" target=" blank">5912351</a>). Provides Cu(2+) ions for the ascorbate-mediated deaminase degradation of the heparan sulfate chains of GPC1 (By similarity). Has glutathione peroxidase-like activity, can remove both hydrogen peroxide and lipid hydroperoxide in the presence of thiols (PubMed:<a

href="http://www.uniprot.org/citations/10481051" target=" blank">10481051</a>). Also shows NO-oxidase and NO2 synthase activities that determine endocrine NO homeostasis (PubMed:<a href="http://www.uniprot.org/citations/16906150" target=" blank">16906150</a>).

## **Cellular Location**

Secreted. Note=Colocalizes with GCP1 in secretory intracellular compartments {ECO:0000250|UniProtKB:P13635}

#### **Tissue Location**

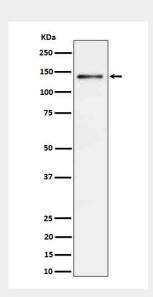
Expressed by the liver and secreted in plasma.

## **Ceruloplasmin Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## Ceruloplasmin Antibody - Images



Western blot analysis of Ceruloplasmin expression in Rat liver cell lysate.