

Ceruloplasmin Antibody Rabbit mAb Catalog # AP93166

## **Specification**

# **Ceruloplasmin Antibody - Product Information**

Application Primary Accession Reactivity Clonality <b>Other Names</b> Ceruloplasmin; CP2; Ferroxidase;	WB <u>P00450</u> Rat Monoclonal
lsotype	Rabbit IgG
Host	Rabbit
Calculated MW	122205 Da

## **Ceruloplasmin Antibody - Additional Information**

Dilution Purification Immunogen	WB~~1:1000 Affinity-chromatography 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 (<u>HGNC:2295</u>)

### 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/14623105" target= \_blank">14623105</a>, PubMed:<a



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.

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

### **Ceruloplasmin Antibody - Images**



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