

CP Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP7340c**Specification**

CP Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [P00450](#)**CP Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 1356**Other Names**

Ceruloplasmin, Ferroxidase, CP

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7340c](/products/AP7340c) was selected from the Center region of human CP. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CP Antibody (Center) Blocking Peptide - 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:[16150804](http://www.uniprot.org/citations/16150804)). Copper ions provide a large number of enzymatic activities. 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 norepinephrine and serotonin (PubMed:[5912351](http://www.uniprot.org/citations/5912351), PubMed:[14623105](http://www.uniprot.org/citations/14623105)). 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:[14623105](#)).

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

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.

CP Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CP Antibody (Center) Blocking Peptide - Images**CP Antibody (Center) Blocking Peptide - Background**

CP is a metalloprotein that binds most of the copper in plasma and is involved in the peroxidation of Fe(II)transferrin to Fe(III) transferrin. Mutations in this protein cause aceruloplasminemia, which results in iron accumulation and tissue damage, and is associated with diabetes and neurologic abnormalities.

CP Antibody (Center) Blocking Peptide - References

Park,Y., Lee,I.S. Arch. Pharm. Res. 32 (5), 693-698 (2009)Altamura,C., Squitti,R. Stroke 40 (4), 1282-1288 (2009)Squitti,R., Quattrocchi,C.C. Prion 2 (1), 23-27 (2008)