

CP

Native Human Ceruloplasmin

Catalog No.	CRC153A CRC153B	Quantity:	1.0 mg 10 mg
Alternate Names:	Ferroxidase		
Description:	<p>Human Ceruloplasmin (CP) is also known as ferroxidase or iron(II):oxygen oxidoreductase. CP is an enzyme synthesized in the liver containing 8 atoms of copper in its structure. Although CP is often considered a copper transport protein, this is not its primary function, just as human hemoglobin is not a carrier of iron, although it contains iron. The main carrier for copper in the plasma of humans is albumin. CP enzyme (ferroxidase) catalyzes the oxidation of ferrous iron (Fe²⁺) to ferric iron (Fe³⁺), therefore assisting in CP enzyme transport in the plasma in association with transferrin, which can only carry iron in the ferric state.</p> <p>Human Ceruloplasmin enzyme has been used in the diagnosis of Wilson's Disease (hepatolenticular degeneration) and for detection of Hodgkins Disease, infections, malignancy and trauma.</p>		
UniProt ID:	P00450		
Gene ID:	1356		
Source:	Human Plasma		
Molecular Weight:	132 kDa		
Formulation:	Lyophilized from 50 mM potassium phosphate, 100 mM potassium chloride, 20 mM EACA, 5 mM EDTA, pH 6.8		
Purity:	≥ 95% by SDS-PAGE		
Reconstitution:	<p>Centrifuge vial prior to opening. Reconstitute with sterile, high purity water for a concentration of 5.0 mg/ml. Make further dilutions in the same original formulation buffer. Exposure to sodium should be avoided as ceruloplasmin may precipitate under these conditions.</p>		
Handling:	<p>The donors have been tested and found to be negative for HbsAg, HCV, HIV-1, HIV-2, Syphilis and HIV-1 antigen by currently approved FDA methods. However, because no test method can offer complete assurance that infectious agents are absent, this material should be handled at Bio-Safety Level 2 (BSL 2) as recommended for potentially infectious human serum or blood specimen in the CCD/NIH manual "Biosafety in Microbiological and Biomedical Laboratories", 1999.</p>		
Storage & Stability:	<p>Store unopened at -20°C for up to 1 year. Following reconstitution, store at 2-8°C. Avoid freeze-thaw cycles.</p>		

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

