

# Ceruloplasmin, Human Plasma

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| <b>CATALOG NO:</b>         | P1452-1 1 mg  |
| <b>ALTERNATE NAMES:</b>    | CER, CP, CP-2, Ferroxidase  |
| <b>MOL. WT.</b>            | 132,000   |
| <b>SOURCE:</b>             | Human Plasma  |
| <b>PURITY:</b>             | >95%  |
| <b>FORM:</b>               | Lyophilized   |
| <b>FORMULATION:</b>        | Lyophilized from 50 mM potassium phosphate, 100 mM potassium chloride, 20 mM EACA, and 5 mM EDTA, pH 6.8. |
| <b>RECONSTITUTION:</b>     | Reconstitute in De-ionized water. Store in aliquots at -20°C.   |
| <b>STORAGE CONDITIONS:</b> | Store at -20°C. Once reconstituted store in aliquots at -20°C. Avoid repeated freeze-thaw cycles.         |

**DESCRIPTION:** Human Ceruloplasmin (CER) is officially known as ferroxidase or iron(II):oxygen oxidoreductase. CER is an enzyme synthesized in the liver containing 8 atoms of copper in its structure. Although Human CERULOPLASMIN (CER) 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. Ceruloplasmin enzyme (ferroxidase) catalyzes the oxidation of ferrous iron (Fe<sup>2+</sup>) to ferric iron (Fe<sup>3+</sup>), therefore assisting in Human Ceruloplasmin enzyme transport in the plasma in association with transferrin, which can only carry iron in the ferric state

Negative or non-reactive at the donor level for anti-HIV 1 and 2, anti-HCV, HBsAg, HCV NAT, HIV-1 NAT and syphilis by FDA approved methods.

***FOR RESEARCH USE ONLY! Not to be used on humans.***