

Product Specification Sheet

Dog Ceruloplasmin (Cp) Antibodies

Cat. # CP18-A

Rabbit Anti-Dog Cp IgG, aff pure

SIZE: 100 ug

Ceruloplasmin (Cp) is a plasma metalloprotein synthesized and secreted by the liver. Cp (also known as ferroxidase; iron (II):oxygen oxidoreductase, EC 1.16.3.1) is a blue alpha-2-glycoprotein that binds 90 to 95% of plasma copper and has 6 or 7 cupric ions per molecule. It is involved in peroxidation of Fe(II) transferrin to form Fe(III) transferrin. Human Cp is a single polypeptide chain (1065 aa, 135 kDa; chromosome 8q21.13-q23.1) structurally similar to factors V and VIII. Cp also has abundant expression in specific populations of glial cells within the brain. Hereditary Cp deficiency have profound iron accumulation in most tissues. Cp -/- mice showed no abnormalities in cellular iron uptake but a striking impairment in the movement of iron out of reticuloendothelial cells and hepatocytes. Cp may play an essential physiologic role in determining the rate of iron efflux from cells with mobilizable iron stores.

Source of Antigen and Antibodies

Antigen	Purified dog Ceruloplasmin protein
Ab Host/type	Rabbit, Polyclonal purified IgG, purified over antigen-agarose (Cat # CP18-A)
2-Ab	Goat Anti-rabbit IgG-HRP cat # 20320 (AP, biotin, FITC conjugates also available)
-ve control IgG	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as -ve control

Form & Storage of Antibodies/Peptide Control

Antibody (purified)

100ug solution lyophilized powder
Supplied in Buffer: PBS, 0.2% BSA, and 0.05% azide
Reconstitute powder in 100 ul PBS

Storage

Short-term: unopened, undiluted vials for less than a week at 4oC.

Long-term: at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20oC or below.

Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

Western Blotting (1:1K-5K for aff pure IgG using Chemiluminescence technique). Cp is ~135 kDa.

ELISA (1:100K; using 50-100 ng control antigen/well).

Histochemistry & Immunofluorescence: Not tested

Specificity & Cross-reactivity

The antibodies have been tested in dog but crossreactivity is expected with other species. Antibody cross-reactivity in various species has not been studied. Antibodies to human, mouse, rat Cp and the purified proteins are also available.

General References: (1). Koschinsky ML et al (1986) PNAS 83, 5086-5090; Daimon M et al (1995) BBRC 208, 1028-1035; Yang F et al (1986) PNAS 83, 3257-3261; Yakahashi N et al (1984) PNAS 81, 390-394; YANG Fm et al (1990) JBC 265, 10780-10785

*This product is for in vitro research use only.

CP18-A

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