

Basic Information

Product Name	Anti-Ceruloplasmin/CP Antibody	
Gene Name	CP	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	mouse, rat	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS , 0.02% Na ₃ N , 1 mg BSA and 50% glycerol.	
Immunogen	E. coli-derived mouse Ceruloplasmin recombinant protein (Position: R20-M258). Mouse Ceruloplasmin shares 80.8% and 91.2% amino acid (aa) sequence identity with human and rat Ceruloplasmin, respectively.	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	122KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry(Paraffin-embedded Section): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

Ceruloplasmin (or^oCaeruloplasmin) is a ferroxidase enzyme that in humans is encoded by the^oCP gene. It is mapped to 3q23-q25. The protein encoded by this gene 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 gene cause aceruloplasminemia, which results in iron accumulation and tissue damage, and is associated with diabetes and neurologic abnormalities. Two transcript variants, one protein-coding and the other not protein-coding, have been found for this gene.

Selected Validation Data

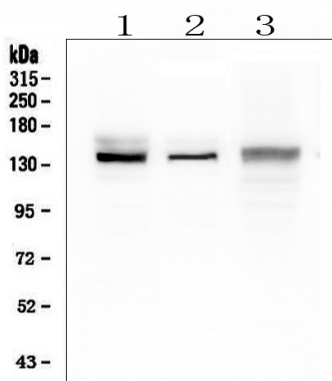


Figure 1. Western blot analysis of anti- Ceruloplasmin/CP antibody (PB9853). The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: rat liver tissue lysates,

Lane 2: mouse liver tissue lysates,

Lane 3: rat liver tissue lysates,

Lane 4: Hela whole cell lysates.

Use rabbit anti- Ceruloplasmin/CP 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for Ceruloplasmin/CP at approximately 130KD. The expected band size for Ceruloplasmin/CP is at 121KD.

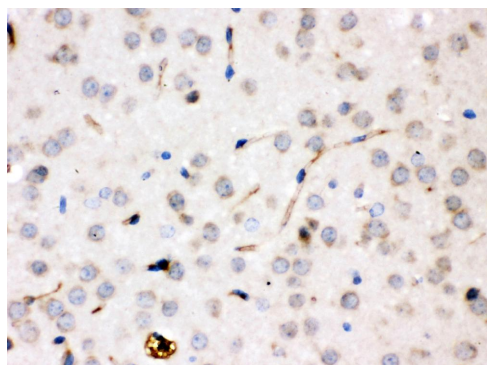


Figure 2. IHC analysis of Ceruloplasmin/CP using anti- Ceruloplasmin/CP antibody (PB9853).

Ceruloplasmin/CP was detected in paraffin-embedded section of rat brain tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1μg/ml rabbit anti- Ceruloplasmin/CP Antibody (PB9853) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.