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Anti-Ceruloplasmin Picoband Antibody

Catalog # ABO12538

Product Information

Application	WB, IHC-P
Primary Accession	P00450
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Ceruloplasmin(CP) detection. Tested with WB, IHC-P in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	1356
Other Names	Ceruloplasmin, 1.16.3.1, Ferroxidase, CP
Calculated MW	122219
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Secreted. Colocalizes with GCP1 in secretory intracellular compartments. .
Tissue Specificity	Expressed by the liver and secreted in plasma.
Source	Eukaryota
Protein Name	Ceruloplasmin
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E. coli-derived human Ceruloplasmin recombinant protein (Position: K20-M259). Human Ceruloplasmin shares 80.8% and 79.6% amino acid (aa) sequence identity with mouse and rat Ceruloplasmin, respectively.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also

be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

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). 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 norepinephrin and serotonin (PubMed:14623105, PubMed:4643313, PubMed:5912351). 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:10481051). Acts as an inhibitor of the peroxidase activity of MPO (By similarity). 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.

Background

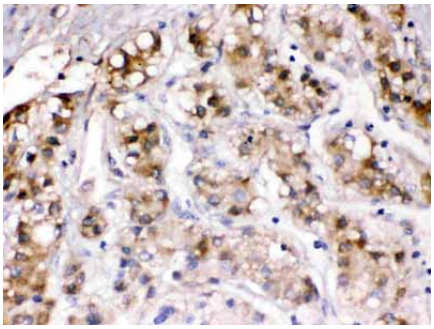
Ceruloplasmin (or caeruloplasmin) is a ferroxidase enzyme that in humans is encoded by the CP gene. It is mapped to 3q23-q25. The protein encoded by this gene is a metalloprotein that binds most of the copper in plasma and is involved in the peroxidation of Fe(II)transferrin to Fe(III) transferrin. Mutations 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.

Images



Western blot analysis of Ceruloplasmin expression in 22RV1 whole cell lysates (lane 1) and A549 whole cell lysates (lane 2). Ceruloplasmin at 122KD was detected using rabbit anti- Ceruloplasmin Antigen Affinity purified polyclonal antibody at0.5 ¼g/mL. The blot was developed using chemiluminescence (ECL) method .

Ceruloplasmin was detected in paraffin-embedded sections of human liver cancer tissues using rabbit anti-Ceruloplasmin Antigen Affinity purified polyclonal antibody (Catalog # ABO12538) at 1 ??g/mL. The immunohistochemical section was developed using SABC



method .

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