10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Ceruloplasmin Picoband Antibody

Catalog # ABO12538

Specification

Anti-Ceruloplasmin Picoband Antibody - Product Information

Application	**WB, IHC**
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.

Anti-Ceruloplasmin Picoband Antibody - Additional Information

Gene ID 1356

Other Names
Ceruloplasmin, 1.16.3.1, Ferroxidase, CP

Calculated MW
122205 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat

Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Secreted. Colocalizes with GCP1 in secretory intracellular compartments. .

Tissue Specificity
Expressed by the liver and secreted in plasma.

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.

Anti-Ceruloplasmin Picoband Antibody - 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 activites. 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). 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.

Anti-Ceruloplasmin Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Ceruloplasmin Picoband Antibody - Images

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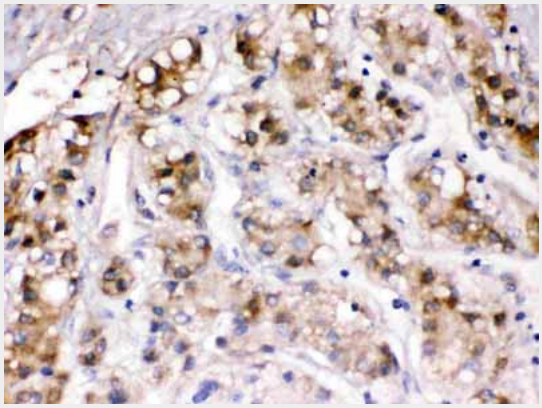
Western blot analysis of Ceruloplasmin expression in 22RV1 whole cell lysates (lane 1) and A549 whole cell lysates (lane 2). Ceruloplasmin at 122KD was detected using rabbit anti- Ceruloplasmin Antigen Affinity purified polyclonal antibody at0.5 Î¼g/mL. The blot was developed using chemiluminescence (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 .

Anti-Ceruloplasmin Picoband Antibody - Background

CeruloplasminÂ (orÂ caeruloplasmin) is aÂ ferroxidaseÂ enzymeÂ that in humans is encoded by theÂ CPÂ 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.