



# Anti-Ceruloplasmin monoclonal antibody, clone MAFB4020 (CAB-1098MH)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Product Overview</b>	Mouse Anti-CP Monoclonal Antibody
<b>Antigen Description</b>	Ceruloplasmin (or caeruloplasmin) is a ferroxidase enzyme that in humans is encoded by the CP gene. Ceruloplasmin is the major copper-carrying protein in the blood, and in addition plays a role in iron metabolism. It was first described in 1948. It is an enzyme synthesized in the liver containing 6 atoms of copper in its structure. Ceruloplasmin carries about 70% of the total copper in human plasma. Ceruloplasmin exhibits a copper-dependent oxidase activity, which is associated with possible oxidation of Fe <sup>2+</sup> (ferrous iron) into Fe <sup>3+</sup> (ferric iron), therefore assisting in its transport in the plasma in association with transferrin, which can only carry iron in the ferric state. The molecular weight of human ceruloplasmin is reported to be 151kDa.
<b>Specificity</b>	Anti-Ceruloplasmin recognizes recombinant protein Ceruloplasmin.
<b>Target</b>	Ceruloplasmin
<b>Immunogen</b>	Purified mouse monoclonal antibody generated using E.coli expressed recombinant protein Ceruloplasmin as immunogen, corresponding to fragment(aa/933-1065) Ceruloplasmin.
<b>Isotype</b>	IgG2a
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	MAFB4020
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ELISA, WB
<b>Format</b>	Each vial contains 100µg IgG in 100µl of citrate-tris-HCl buffer pH7.0 with 0.02% Proclin 300.

<b>Size</b>	100 µl
<b>Preservative</b>	None
<b>Storage</b>	The antibody may be stored at -20°C for one year in its original formulation. Additionally, antibody may be stored at 2°C to 8°C for up to 1 month without detectable loss of activity. Avoid repeated freeze-thaw cycles of the diluted antibody.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">CP ceruloplasmin (ferroxidase) [ Homo sapiens ]</a>
<b>Official Symbol</b>	CP
<b>Synonyms</b>	CP; ceruloplasmin (ferroxidase); ceruloplasmin; CP-2;
<b>Entrez Gene ID</b>	<a href="#">1356</a>
<b>Protein Refseq</b>	<a href="#">NP_000087</a>
<b>UniProt ID</b>	<a href="#">A5PL27</a>
<b>Chromosome Location</b>	3q23-q25
<b>Pathway</b>	HIF-1-alpha transcription factor network, organism-specific biosystem; Iron uptake and transport, organism-specific biosystem; Metal ion SLC transporters, organism-specific biosystem; Porphyrin and chlorophyll metabolism, organism-specific biosystem; Porphyrin and chlorophyll metabolism, conserved biosystem; SLC-mediated transmembrane transport, organism-specific biosystem; Transmembrane transport of small molecules, organism-specific biosystem;
<b>Function</b>	chaperone binding; copper ion binding; ferroxidase activity; metal ion binding; oxidoreductase activity;