Technical Data Sheet

Purified Mouse Anti-Ceruloplasmin

Product Information

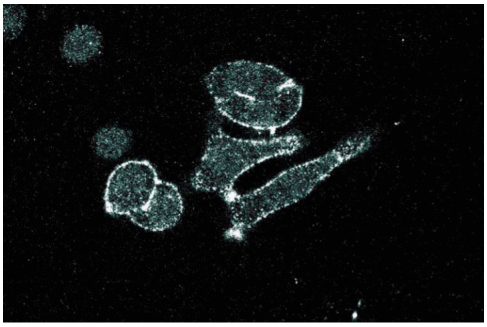
Material Number:	**611488**
Size:	50 µg
Concentration:	250 µg/ml
Clone:	8/Ceruloplasmin
Immunogen:	Mouse ceruloplasmin aa. 233-355
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Rat Tested in Development: Human, Mouse
Target MW:	132 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Ceruloplasmin (CP) is a copper-containing glycoprotein that carries approximately 90% of plasma copper. CP contains six copper atom binding sites and is prone to transfer its copper atoms to tissues, however it is not essential for copper transport. In cultured endothelial cells, CP release of copper in the cytosol inhibits nitric oxide synthase activation, and this may be important for regulating vascular tone in blood vessels. In addition to its copper binding role, CP has also been shown to have ferroxidase activity, which involves conversion of ferrous to ferric iron. The iron metabolism disorder aceruloplasminemia results from mutations in CP and is characterized by massive iron deposits in liver, pancreas, brain, retina, and other tissues. CP is expressed in the liver, the splenic reticuloendothelial system, the bronchiolar epithelium of the lung, and the retina and brain. The cell-specific expression of CP in neural tissues may account for the neuropathologies associated with aceruloplaminemia, while the wide expression pattern of CP may demonstrate its importance in the regulation of copper and iron levels in many tissues.

This antibody is routinely tested by western blot analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.

Western blot analysis of Ceruloplasmin on a rat testis lysate. *Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the anti-Ceruloplasmin antibody.*



Immunofluorescence staining of SK-BR-3 cells (Human breast adenocarcinoma; ATCC HTB-30).

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at -20° C.

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Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
611472	Rat Testis Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Igs	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Igs	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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