

Datasheet: VMA00964

BATCH NUMBER 100005800

Description:	MOUSE ANTI COPA
Specificity:	COPA
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Clone:	AB01/4A11
Isotype:	IgG1
Quantity:	100 µl

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Immunoprecipitation	▪			
Western Blotting	▪			1/1000

The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click [here](#) to learn how we validate our PrecisionAb range. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependent on sample type.

Target Species	Human
Product Form	Purified IgG - Liquid
Preparation	Mouse monoclonal antibody affinity purified on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	<i>E. coli</i> -derived recombinant protein of amino acids 790-1224 of human COPA

External Database**Links****UniProt:**

[P53621](#) [Related reagents](#)

Entrez Gene:

[1314](#) COPA [Related reagents](#)

Fusion Partners

Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line

Specificity

Mouse anti COPA antibody recognizes coatmer subunit alpha, also known as alpha-coat protein, HEPCOP. COPA is a subunit of the coatmer protein complex (COPI). The COPI coat is important for maintaining intra-Golgi and retrograde Golgi-ER trafficking of proteins and lipids, and helps maintain the polarized Golgi structure ([Bykov et al. 2017](#)). COPI may also be involved with endosomal transport and function ([Arakel and Schwappach 2018](#)). Mutations in the gene encoding COPA cause COPA Syndrome, an autosomal dominant disease which typically involves arthritis and interstitial lung disease with pulmonary hemorrhage. The underlying mechanism appears to involve ER stress caused by impaired protein return from the Golgi, possibly resulting in dysregulated autophagy ([Vece et al. 2016](#)).

Western Blotting

Mouse anti COPA detects a band of approximately 150 kDa in HepG2 cell lysates

Storage

Store undiluted at -20°C, avoiding repeated freeze thaw cycles

Guarantee

12 months from date of despatch

Acknowledgements

PrecisionAb is a trademark of Bio-Rad Laboratories

Health And Safety Information

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/VMA00964>
Antibody (10040)

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (H/L) (STAR207...) [HRP](#)

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