abcam

Product datasheet

# Anti-COP1 antibody [1E4] ab56400

4 Abreviews 14 References 4 Images

## Overview

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|---|---|
| **Product name** | Anti-COP1 antibody [1E4] |
| **Description** | Mouse monoclonal [1E4] to COP1 |
| **Host species** | Mouse |
| **Tested applications** | **Suitable for:** WB, ICC/IF, IHC-P, Flow Cyt |
| **Species reactivity** | **Reacts with:** Mouse, Human |
| **Immunogen** | Recombinant fragment: CLRSFKGHIN EKNFVGLASN GDYIACGSEN NSLYLYYKGL SKTLLTFKFD TVKSVLDKDR KEDDTNEFVS AVCWRALPDG ESNVLIAANS QGTIKVLELV , corresponding to amino acids 632-732 of Human COP1<br>Run BLAST with ExPASy Run BLAST with NCBI |
| **Positive control** | This antibody gave a positive result in IHC in the following FFPE tissue: Human normal heart muscle. |
| **General notes** | This product was changed from ascites to tissue culture supernatant on 30th April 2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.<br><br>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.<br><br>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As |

## Properties

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| **Form** | Liquid |
| **Storage instructions** | Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. |
| **Storage buffer** | pH: 7.40<br>Constituent: PBS |
| **Purity** | Tissue culture supernatant |
| **Purification notes** | Purified from TCS. |

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| **Clonality** | Monoclonal |
| **Clone number** | 1E4 |
| **Isotype** | IgG2b |
| **Light chain type** | kappa |

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab56400 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|---|---|---|
| **WB** | ★★★★☆ (3) | Use at an assay dependent concentration. Predicted molecular weight: 80 kDa. |
| **ICC/IF** | ★★★★★ (1) | Use at an assay dependent concentration. |
| **IHC-P** | | Use at an assay dependent concentration. |
| **Flow Cyt** | | Use at an assay dependent concentration.<br>**ab170192** - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody. |

## Target

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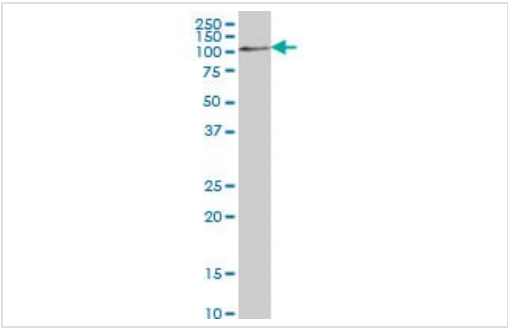
| **Function** | E3 ubiquitin-protein ligase that mediates ubiquitination and subsequent proteasomal degradation of target proteins. E3 ubiquitin ligases accept ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfers the ubiquitin to targeted substrates. Involved in JUN ubiquitination and degradation. Directly involved in p53 (TP53) ubiquitination and degradation, thereby abolishing p53-dependent transcription and apoptosis. Ubiquitinates p53 independently of MDM2 or RCHY1. Probably mediates E3 ubiquitin ligase activity by functioning as the essential RING domain subunit of larger E3 complexes. In contrast, it does not constitute the catalytic RING subunit in the DCX DET1-COP1 complex that negatively regulates JUN, the ubiquitin ligase activity being mediated by RBX1. |
| **Tissue specificity** | Ubiquitously expressed at low level. Expressed at higher level in testis, placenta, skeletal muscle and heart. |
| **Pathway** | Protein modification; protein ubiquitination. |
| **Sequence similarities** | Belongs to the COP1 family.<br>Contains 1 RING-type zinc finger.<br>Contains 7 WD repeats. |
| **Domain** | The RING finger domain, in addition to its role in ubiquitination, functions as a structural scaffold to bring two clusters of positive-charged residues within spatial proximity to mimic a bipartite nuclear localization signal (NLS). |
| **Cellular localization** | Nucleus speckle. Cytoplasm. In the nucleus, it forms nuclear speckles. |

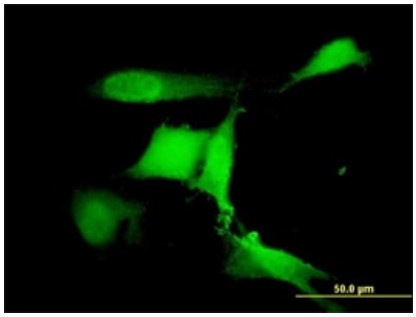
## Images




Western blot - Anti-COP1 antibody [1E4] (ab56400)

COP1 antibody (ab56400) at 1ug/lane + NIH/3T3 cell lysate at 25ug/lane.

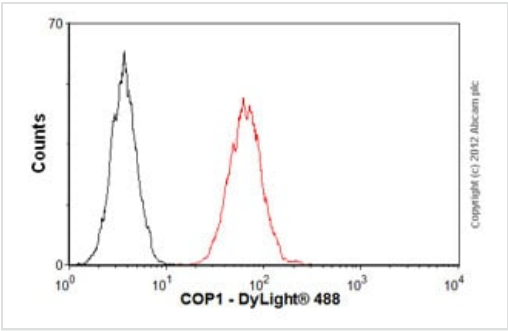
This image was generated using the ascites version of the product.




Immunocytochemistry/ Immunofluorescence - Anti-COP1 antibody [1E4] (ab56400)

Immunofluorescence of ab56400 on NIH/3T3 cell [antibody concentration 10 ug/ml].

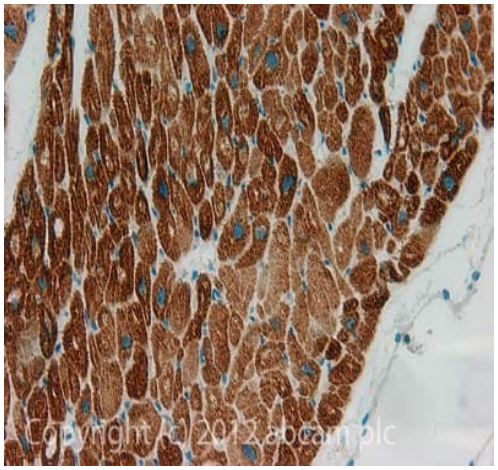
This image was generated using the ascites version of the product.




Flow Cytometry - Anti-COP1 antibody [1E4] (ab56400)

Overlay histogram showing NIH3T3 cells stained with ab56400 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab56400, 1µg/1x$10^6$ cells) for 30 min at 22ºC. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22ºC. Isotype control antibody (black line) was mouse IgG2b [PLPV219] (**ab91366**, 2µg/1x$10^6$ cells ) used under the same conditions. Acquisition of >5,000 events was performed.

This image was generated using the ascites version of the product.




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COP1 antibody [1E4] (ab56400)

IHC image of COP1 staining in Human normal heart muscle formalin fixed paraffin embedded tissue section, performed on a Leica BondTM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab56400, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

This image was generated using the ascites version of the product.



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