

Datasheet: VMA00651

Description:	MOUSE ANTI CDC42
Specificity:	CDC42
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Clone:	EF01/3E10
Isotype:	IgG2b
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
Immunohistology - Paraffin	▪			1/10 - 1/50
Western Blotting	▪			1/1000 - 1/2000

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

Species Cross Reactivity

Reacts with: Mouse, Rat

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation

Mouse monoclonal antibody purified by affinity chromatography on Protein G from tissue culture supernatant.

Buffer Solution

Phosphate buffered saline.

Preservative

0.09% Sodium Azide (NaN₃).

Stabilisers

Approx. Protein Concentrations IgG concentration 1.0 mg/ml.

Immunogen *E. coli*-derived recombinant human CDC42 (aa 1-191)

External Database Links

UniProt:
[P60953](#) [Related reagents](#)

Entrez Gene:
[998](#) CDC42 [Related reagents](#)

Specificity **Mouse anti Human CDC42 antibody** recognizes cell division control protein 42 homolog, also known as G25K GTP-binding protein or growth-regulating protein, small GTP binding protein CDC42.

CDC42 is part of the Rho family of small GTPases which act as molecular switches by cycling between an active (GTP-bound) and an inactive (GDP-bound) state, regulated by a variety of proteins including guanine nucleotide exchange factors (GEFs). When activated, CDC42 interacts with effectors and controls multiple signaling pathways affecting cell cycle progression, morphology, and migration (Watson et al. 2017) including Raf-MEK-ERK and PI3K-Akt signaling, and plays a critical role in actin polymerization and extension, and cell polarity (Humphries-Bickley et al. 2017). Due to these functions, overexpression of CDC42 activation is oncogenic and contributes to metastasis (Qadir et al. 2015). Overexpression rather than mutation of CDC42 in a variety of cancers has led to the suggestion that it could be a useful target for inhibition in cancer therapy, or for overcoming resistance to cancer therapies (del Mar Maldonado and Dharmawardhane 2018)

Western Blotting Mouse anti CDC42 antibody detects a band of approximately 21 kDa in HeLa 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/VMA00651>
Antibody (10040)

Regulatory For research purposes only.

Related Products

Recommended Secondary Antibodies

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

Recommended Negative Controls

MOUSE IgG2b NEGATIVE CONTROL (MCA691)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M399844:220704'

Printed on 13 Aug 2023

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)