Datasheet: VMA00906

Description:	MOUSE ANTI UBC
Specificity:	UBC
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Clone:	AB04/3D2
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
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 (NaN_3)

Stabilisers	
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	*E. coli*-derived recombinant protein, aa 1-304 of human UBC
External Database Links	**UniProt:** P0CG48 Related reagents **Entrez Gene:** 7316 UBC Related reagents
Specificity	**Mouse anti UBC antibody** recognizes polyubiquitin-C. UBC is important for maintaining homeostatic levels of ubiquitin (Ub), an abundant protein which is one of the most important post-translational modifiers within the proteome. Ubiquitination marks proteins and organelles for degredation or autophagic clearance, essential for normal cellular functions (Senft et al. 2018). UBC is upregulated during stress and downregulated when Ub is overexpressed, and appears to play a protective role in response to stress (Bianchi et al. 2019). The promoter of the UBC gene includes heat-shock elements (HSEs) which explain its upregulation during stress. Accordingly, Ub itself is considered a hest shock protein (Crinelli et al. 2015). Proteasomal degradation, mediated by Ub, is often dysregulated in cancer cells and can lead to tumorigenesis and cancer progression. Furthermore, UBC interacts with many cancer-associated proteins, including CDK1, E2F1, EGFR and p53, and might be involved with regulation of the tumor microenvironment (Kim et al. 2017). Components of the Ub pathway have been suggested as drug targets for cancer therapy (Liu et al. 2016).
Western Blotting	Mouse anti UBC antibody detects a band of approximately 10 kDa in HeLa cell lysates
Storage	Store undiluted at -20^{o}C, avoiding repeated freeze thaw cycles
Guarantee	As supplied, 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/VMA00906 10040
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG2b NEGATIVE CONTROL (MCA691)

North & South America	Tel: +1 800 265 7376 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

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