

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 (NaN₃)

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 degradation 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 heat 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°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: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL \(MCA691\)](#)

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

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