

Datasheet: VMA00906

**BATCH NUMBER 100005035**

<b>Description:</b>	MOUSE ANTI UBC
<b>Specificity:</b>	UBC
<b>Format:</b>	Purified
<b>Product Type:</b>	PrecisionAb Monoclonal
<b>Clone:</b>	AB04/3D2
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	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](http://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.

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	Reacts with: Mouse, Rat <b>N.B.</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.
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Mouse monoclonal antibody purified by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant protein, aa 1-304 of human UBC
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P0CG48</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">7316</a>    UBC    <a href="#">Related reagents</a></p>
<b>Specificity</b>	<p><b>Mouse anti UBC antibody</b> recognizes polyubiquitin-C.</p> <p>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).</p>
<b>Storage</b>	Store undiluted at -20°C, avoiding repeated freeze thaw cycles
<b>Guarantee</b>	As supplied, 12 months from date of despatch
<b>Acknowledgements</b>	PrecisionAb is a trademark of Bio-Rad Laboratories
<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation #10040 available at:  <a href="https://www.bio-rad-antibodies.com/SDS/VMA00906">https://www.bio-rad-antibodies.com/SDS/VMA00906</a>  10040</p>
<b>Regulatory</b>	For research purposes only

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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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