

## Datasheet: VMA00610

<b>Description:</b>	MOUSE ANTI SMC3
<b>Specificity:</b>	SMC3
<b>Format:</b>	Purified
<b>Product Type:</b>	PrecisionAb Monoclonal
<b>Clone:</b>	AB02/4E11
<b>Isotype:</b>	IgG1
<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	■			1/500 - 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>	<p>Reacts with: Mouse, Rat</p> <p><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.</p>
<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 human SMC3 (aa 903-1217)
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q9UQE7</a>   <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">9126</a>   SMC3   <a href="#">Related reagents</a></p>
<b>Synonyms</b>	BAM, BMH, CSPG6, SMC3L1
<b>Specificity</b>	<p><b>Mouse anti Human SMC3 antibody</b> recognizes SMC3, also known as BAM, HCAP, CDLS3, CSPG6 or BMH.</p> <p>The SMC3 protein is a subunit of cohesin, a ubiquitously-expressed complex associated with sister chromatid cohesion, chromatin structure, gene expression, and DNA repair (<a href="#">Hill et al. 2016</a>). Establishment of cohesion between replicated sister chromatids is important for ensuring their correct segregation during anaphase of the cell cycle. Acetylation of SMC3 during S phase is essential for the function of cohesin. Deacetylation of SMC3 during telophase is important for recycling cohesin so it can be reloaded during interphase (<a href="#">Dasgupta et al. 2016</a>). Genes encoding subunits of cohesin are mutated in a range of cancers. Mutations in SMC3 have been found in chronic myelogenous leukemia and glioblastoma (<a href="#">Solomon et al. 2014</a>). A post-translationally modified form of SMC3 is secreted as bamacan (<a href="#">Ghiselli et al. 2003</a>), a basement membrane protein (<a href="#">Ghiselli and Iozzo 2000</a>).</p>
<b>Western Blotting</b>	Mouse anti SMC3 antibody detects a band of approximately 144 kDa in HEK293 cell lysates.
<b>Storage</b>	<p>This product is shipped at ambient temperature.</p> <p>Store undiluted at -20°C, avoiding repeated freeze thaw cycles</p>
<b>Guarantee</b>	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/VMA00610">https://www.bio-rad-antibodies.com/SDS/VMA00610</a></p> <p>Antibody (10040)</p>
<b>Regulatory</b>	For research purposes only.

## Related Products

### Recommended Secondary Antibodies

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

## Recommended Negative Controls

### [MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto: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](mailto: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](https://bio-rad-antibodies.com/datasheets)

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