

Datasheet: VMA00610

BATCH NUMBER 100004383

Description:	MOUSE ANTI SMC3
Specificity:	SMC3
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Clone:	AB02/4E11
Isotype:	IgG1
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	▪			1/500 - 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.

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 Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	<i>E. coli</i> -derived recombinant human SMC3 (aa 903-1217)
External Database Links	<p>UniProt: Q9UQE7 Related reagents</p> <p>Entrez Gene: 9126 SMC3 Related reagents</p>
Synonyms	BAM, BMH, CSPG6, SMC3L1
Specificity	<p>Mouse anti Human SMC3 antibody 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 (Hill et al. 2016). 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 (Dasgupta et al. 2016). Genes encoding subunits of cohesin are mutated in a range of cancers. Mutations in SMC3 have been found in chronic myelogenous leukemia and glioblastoma (Solomon et al. 2014). A post-translationally modified form of SMC3 is secreted as bamacan (Ghiselli et al. 2003), a basement membrane protein (Ghiselli and Iozzo 2000).</p>
Western Blotting	Mouse anti SMC3 antibody detects a band of approximately 144 kDa in HEK293 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/VMA00610 Antibody (10040)
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

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

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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

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