

Datasheet: VMA00913

BATCH NUMBER 64682962

Description:	MOUSE ANTI PSMC1
Specificity:	PSMC1
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Clone:	EF02/2E2
Isotype:	IgG2a
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	▪			1/2000

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 affinity purified on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide

Stabilisers

Approx. Protein Concentrations IgG concentration 1.0 mg/ml

Immunogen *E. coli*-derived recombinant protein of amino acids 1-440 of human PSMC1

External Database Links

UniProt:
[P62191](#) [Related reagents](#)

Entrez Gene:
[5700](#) PSMC1 [Related reagents](#)

Fusion Partners Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line

Specificity **Mouse anti PSMC1 antibody** recognizes 26S proteasome regulatory subunit 4, also known as PRS4 and P26s4.

PSMC1 is a ubiquitously-expressed ATPase which belongs to the triple-A family and plays an essential role in the 19S proteasome, essential for correct function of all cells. Incorrect function of the 26S proteasome, leading to an inability to degrade proteins, has been implicated in neurodegenerative diseases ([Czub et al. 2016](#)). A role of PSMC1 in the pathogenesis of Parkinson's disease has been suggested, but appears unlikely ([Gomez-Garre et al. 2012](#)). PSMC1 exists in a complex with PSMD2 and PSMD5, and may act as a reservoir to protect cells from harmful effects of suppression of the essential gene encoding PSMC2 ([Nijhawan et al. 2012](#)).

Western Blotting Mouse anti PSMC1 detects a band of approximately 57 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/VMA00913>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

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

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M429651:240410'

Printed on 09 Jul 2025

© 2025 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)