

Datasheet: VMA00942

BATCH NUMBER 100005799

Description:	MOUSE ANTI VESICLE-FUSING ATPase
Specificity:	VESICLE-FUSING ATPase
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Clone:	CD01/1F3
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
Immunoprecipitation	▪			
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 Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	<i>E. coli</i> -derived recombinant protein of amino acids 500-744 of human vesicle-fusing ATPase
External Database Links	<p>UniProt: P46459 Related reagents</p> <p>Entrez Gene: 4905 NSF Related reagents</p>
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line
Specificity	<p>Mouse anti Vesicle-fusing ATPase antibody recognizes vesicle-fusing ATPase, also known as NEM-sensitive fusion protein (NSF). Vesicle-fusing ATPase is an ATPase that plays a role in vesicular traffic by associating with SNAP and the membrane-fusing SNARE proteins, forming the 20S complex important for membrane trafficking (Nishizaki et al. 2016). Vesicle-fusing ATPase in combination with SNAPs is able to disassemble the SNARE complex, leading to release of neurotransmitters and facilitating other membrane trafficking processes (Choi et al. 2018). In addition, vesicle-fusing ATPase is responsible for regenerating active SNAREs after fusion, ready for the next round of fusion. In neurons, inactivation of vesicle-fusing ATPase results in a huge buildup of Golgi fragments, transport vesicles, and late endosomes, followed by delayed neuronal death (Yuan et al. 2019). Defects in membrane trafficking have been reported in a range of human diseases including cancer, diabetes, neurodegenerative disorders, ciliopathies, and infections (Yoon et al. 2018).</p>
Western Blotting	Mouse anti vesicle-fusing ATPase detects a band of approximately 80 kDa in Jurkat 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/VMA00942 Antibody (10040)
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

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

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: 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

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: 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

'M390077:210823'

Printed on 25 Mar 2023

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)