

Datasheet: MCA2539B

Description:	RAT ANTI MOUSE PLVAP:Biotin
Specificity:	PLVAP
Other names:	MECA-32, PLASMALEMMA VESICLE ASSOCIATED PROTEIN
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	MECA-32
Isotype:	IgG2a
Quantity:	0.1 mg

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
Flow Cytometry			▪	
Immunohistology - Frozen	▪			Neat - 1/10

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Mouse
Product Form	Purified IgG conjugated to Biotin - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide (NaN ₃)
Stabilisers	1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1mg/ml

**External Database
Links**

UniProt:

[Q91VC4](#) [Related reagents](#)

Entrez Gene:

[84094](#) Plvap [Related reagents](#)

Synonyms

Pv1

RRID

AB_999320

Fusion Partners

Spleen cells from an immunized rat were fused with cells of the Sp2/0 myeloma cell line.

Specificity

Rat anti Mouse PLVAP antibody, clone MECA-32 recognizes murine plasmalemma vesicle-associated protein (PLVAP), a ~60 kDa protein also known as MECA-32 and PV-1. PLVAP is a transmembrane homodimer associated with endothelial cell caveolae and fenestrae. In adult and embryonic mice, PLVAP is primarily expressed on endothelial tissues but shows restricted distribution in skeletal, cardiac and brain tissues. In embryonic mice, PLVAP expression, on the vasculature associated with blood brain barrier has been reported to be developmentally regulated.

In humans, PLVAP is selectively up-regulated in a variety of high-grade brain tumors, including glioblastoma and metastatic carcinoma, as well as other cerebral disorders associated with blood-brain barrier disruption, such as acute ischemia. PLVAP represents a novel marker of brain tumour angiogenesis and integrity of the blood-brain barrier and is a potential therapeutic target.

Flow Cytometry

Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.

References

1. Hallmann, R. *et al.* (1995) Novel mouse endothelial cell surface marker is suppressed during differentiation of the blood brain barrier. [Dev Dyn. 202 \(4\): 325-32.](#)
2. Orford M *et al.* (2009) Generation of an ABCG2(GFPn-puro) transgenic line--a tool to study ABCG2 expression in mice. [Biochem Biophys Res Commun. 384 \(2\): 199-203.](#)
3. Daneman, R. *et al.* (2010) Pericytes are required for blood-brain barrier integrity during embryogenesis. [Nature. 468 \(7323\): 562-6.](#)
4. Okizaki, S. *et al.* (2016) Vascular Endothelial Growth Factor Receptor Type 1 Signaling Prevents Delayed Wound Healing in Diabetes by Attenuating the Production of IL-1 β by Recruited Macrophages. [Am J Pathol. 186 \(6\): 1481-98.](#)

Further Reading

1. Carson-Walter, E.B. *et al.* (2005) Plasmalemmal vesicle associated protein-1 is a novel marker implicated in brain tumor angiogenesis. [Clin Cancer Res. 11 \(21\): 7643-50.](#)

Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10041 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA2539B>
10041

Regulatory For research purposes only

Related Products

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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](https://www.bio-rad-antibodies.com/datasheets)

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