

## Datasheet: MCA2539GA

<b>Description:</b>	RAT ANTI MOUSE PLVAP
<b>Specificity:</b>	PLVAP
<b>Other names:</b>	MECA-32, PLASMALEMMA VESICLE ASSOCIATED PROTEIN
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MECA-32
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			■	
Immunohistology - Frozen	■			1/25 - 1/100
Immunohistology - Paraffin			■	
ELISA			■	
Immunoprecipitation			■	
Western Blotting			■	

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.

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared 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>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>External Database Links</b>	<b>UniProt:</b>

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

**Entrez Gene:**

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

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<b>Synonyms</b>	Pv1
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<b>Fusion Partners</b>	Spleen cells from an immunized rat were fused with cells of the Sp2/0 myeloma cell line.
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<b>Specificity</b>	<p><b>Rat anti Mouse PLVAP antibody, clone MECA-32</b> 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.</p> <p>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.</p>
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<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.
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<b>References</b>	<ol style="list-style-type: none"><li>1. Hallmann, R. <i>et al.</i> (1995) Novel mouse endothelial cell surface marker is suppressed during differentiation of the blood brain barrier. <a href="#">Dev Dyn. 202 (4): 325-32.</a></li><li>2. Daneman, R. <i>et al.</i> (2010) Pericytes are required for blood-brain barrier integrity during embryogenesis. <a href="#">Nature. 468 (7323): 562-6.</a></li><li>3. Okizaki SI <i>et al.</i> (2016) Vascular Endothelial Growth Factor Receptor Type 1 Signaling Prevents Delayed Wound Healing in Diabetes by Attenuating the Production of IL-1<math>\beta</math> by Recruited Macrophages. <a href="#">Am J Pathol. Apr 13. pii: S0002-9440(16)30030-X. [Epub ahead of print]</a></li><li>4. Orford M <i>et al.</i> (2009) Generation of an ABCG2(GFPn-puro) transgenic line--a tool to study ABCG2 expression in mice. <a href="#">Biochem Biophys Res Commun. 384 (2): 199-203.</a></li></ol>
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<b>Further Reading</b>	<ol style="list-style-type: none"><li>1. Carson-Walter, E.B. <i>et al.</i> (2005) Plasmalemmal vesicle associated protein-1 is a novel marker implicated in brain tumor angiogenesis. <a href="#">Clin Cancer Res. 11 (21): 7643-50.</a></li></ol>
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<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
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<b>Shelf Life</b>	18 months from date of despatch.
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: 10040: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a>
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight®800</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight®649</a> , <a href="#">DyLight®800</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>
Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>

## Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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