

## Datasheet: MCA2388SBV570

<b>Description:</b>	RAT ANTI MOUSE CD31:StarBright Violet 570
<b>Specificity:</b>	CD31
<b>Other names:</b>	PECAM-1
<b>Format:</b>	StarBright Violet 570
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	ER-MP12
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	100 TESTS/0.5ml

### 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	▪			Neat

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 conjugated to StarBright Violet 570 - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	StarBright Violet 570	404	571
<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> ) 1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20		

<b>Approx. Protein Concentrations</b>	For information on the concentration of our StarBright Dye conjugated reagents please visit our <a href="#">FAQ</a> page.
<b>Immunogen</b>	BALB/c macrophage precursor cell hybrids
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q08481</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">18613</a> Pecam1    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	Pecam, Pecam-1
<b>Fusion Partners</b>	Cells from immunised rats were fused with the cells of the rat Y3-Ag1.2.3 myeloma cell line
<b>Specificity</b>	<p><b>Rat anti Mouse CD31 antibody, clone ER-MP12</b> recognizes mouse CD31, a 140 kDa cell surface glycoprotein expressed at high levels on endothelial cells, platelets and most leukocyte subpopulations.</p> <p>CD31 is also expressed on a major population of macrophage / dendritic cell precursors in the bone marrow. Rat anti Mouse CD31 antibody, clone ER-MP12 can be used in conjunction with clone ER-MP20 (<a href="#">MCA2389GA</a>) in two colour flow cytometric analysis, to identify different stages of myeloid progenitor cells in mouse bone marrow (<a href="#">de Bruijn <i>et al.</i> 1998</a>).</p>
<b>Flow Cytometry</b>	Use 5µl of the suggested working dilution to label 0.5x10 <sup>6</sup> cells in 100µl. Best practices suggest a 5 min centrifugation at 6,000g prior to sample application.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Leenen, P.J. <i>et al.</i> (1990) Murine macrophage precursor characterization. II. Monoclonal antibodies against macrophage precursor antigens. <a href="#">Eur J Immunol. 20 (1): 27-34.</a></li> <li>2. van der Loo, J. <i>et al.</i> (1995) Identification of hematopoietic stem cell subsets on the basis of their primitiveness using antibody ER-MP12. <a href="#">Blood. 85:952-62.</a></li> <li>3. Ling, V. <i>et al.</i> (1997) Structural identification of the hematopoietic progenitor antigen ER-MP12 as the vascular endothelial adhesion molecule PECAM-1 (CD31). <a href="#">Eur J Immunol. 27:509-14.</a></li> <li>4. de Bruijn, M.F. <i>et al.</i> (1998) Bone marrow cellular composition in Listeria monocytogenes infected mice detected using ER-MP12 and ER-MP20 antibodies: a flow cytometric alternative to differential counting. <a href="#">J Immunol Methods. 217 (1-2): 27-39.</a></li> <li>5. Wynn, A.A. <i>et al.</i> (2001) Role of granulocyte/macrophage colony-stimulating factor in zymocel-induced hepatic granuloma formation. <a href="#">Am J Pathol. 158 (1): 131-45.</a></li> <li>6. van Rijt, L. <i>et al.</i> (2002) Allergen-induced accumulation of airway dendritic cells is supported by an increase in CD31(hi)Ly-6C(neg) bone marrow precursors in a mouse model of asthma. <a href="#">Blood. 100:3663-71.</a></li> <li>7. Tagoh, H. <i>et al.</i> (2002) Transcription factor complex formation and chromatin fine structure alterations at the murine c-fms (CSF-1 receptor) locus during maturation of myeloid precursor cells. <a href="#">Genes Dev. 16:1721-37.</a></li> </ol>

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**Storage**

This product is shipped at ambient temperature.

Store at +4°C. DO NOT FREEZE.  
This product should be stored undiluted.

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<b>Guarantee</b>	12 months from date of despatch
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<b>Acknowledgements</b>	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20471 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2388SBV570">https://www.bio-rad-antibodies.com/SDS/MCA2388SBV570</a>
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Useful Reagents

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

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

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

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