

Datasheet: MCA2388SBV440

Description:	RAT ANTI MOUSE CD31:StarBright Violet 440
Specificity:	CD31
Other names:	PECAM-1
Format:	StarBright Violet 440
Product Type:	Monoclonal Antibody
Clone:	ER-MP12
Isotype:	IgG2a
Quantity:	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.

	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.

Target Species	Mouse		
Product Form	Purified IgG conjugated to StarBright Violet 440 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	StarBright Violet 440	383	436
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20		

Approx. Protein Concentrations	For information on the concentration of our StarBright Dye conjugated reagents please visit our FAQ page.
Immunogen	BALB/c macrophage precursor cell hybrids
External Database Links	<p>UniProt: Q08481 Related reagents</p> <p>Entrez Gene: 18613 Pecam1 Related reagents</p>
Synonyms	Pecam, Pecam-1
Fusion Partners	Cells from immunised rats were fused with the cells of the rat Y3-Ag1.2.3 myeloma cell line
Specificity	<p>Rat anti Mouse CD31 antibody, clone ER-MP12 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 (MCA2389GA) in two colour flow cytometric analysis, to identify different stages of myeloid progenitor cells in mouse bone marrow (de Bruijn <i>et al.</i> 1998).</p>
Flow Cytometry	Use 5µl of the suggested working dilution to label 0.5x10 ⁶ cells in 100µl. Best practices suggest a 5 min centrifugation at 6,000g prior to sample application.
References	<ol style="list-style-type: none"> 1. Leenen, P.J. <i>et al.</i> (1990) Murine macrophage precursor characterization. II. Monoclonal antibodies against macrophage precursor antigens. Eur J Immunol. 20 (1): 27-34. 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. Blood. 85:952-62. 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). Eur J Immunol. 27:509-14. 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. J Immunol Methods. 217 (1-2): 27-39. 5. Wynn, A.A. <i>et al.</i> (2001) Role of granulocyte/macrophage colony-stimulating factor in zymocel-induced hepatic granuloma formation. Am J Pathol. 158 (1): 131-45. 6. van Rijjt, 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. Blood. 100:3663-71. 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. Genes Dev. 16:1721-37.

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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.

Guarantee	12 months from date of despatch
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Acknowledgements	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
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Health And Safety Information	Material Safety Datasheet documentation #20471 available at: https://www.bio-rad-antibodies.com/SDS/MCA2388SBV440
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Regulatory	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

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