

Datasheet: MCA497SBV515

BATCH NUMBER 100007959

Description:	RAT ANTI MOUSE F4/80:StarBright Violet 515
Specificity:	F4/80
Format:	StarBright Violet 515
Product Type:	Monoclonal Antibody
Clone:	Cl:A3-1
Isotype:	IgG2b
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 515 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	StarBright Violet 515	402	516
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		
	0.1% Pluronic F68		
	0.1% PEG 3350		
	0.05% Tween 20		

Immunogen	Thioglycollate stimulated peritoneal macrophages from C57BL/6 mice.
External Database Links	<p>UniProt: Q61549 Related reagents</p> <p>Entrez Gene: 13733 Emr1 Related reagents</p>
Synonyms	Gpf480
Fusion Partners	Spleen cells from immunized HOB2 rats were fused with cells of the mouse NS1 myeloma cell line.
Specificity	<p>Rat anti Mouse F4/80 antibody, clone A3-1 recognizes the murine F4/80 antigen, a ~160 kDa cell surface glycoprotein member of the EGF-TM7 family of proteins which shares 68% overall amino acid identity with human EGF module-containing mucin-like hormone receptor 1 (EMR1).</p> <p>Expression of F4/80 is heterogeneous and is modulated during macrophage maturation and activation. The F4/80 antigen is expressed on a wide range of mature tissue macrophages including Kupffer cells, Langerhans cells, microglia, macrophages located in the gut lamina propria, peritoneal cavity, lung, thymus, bone marrow stroma and macrophages in the red pulp of the spleen (Hume, et al. 1984). F4/80 antigen is also expressed on a subpopulation of dendritic cells but is absent from macrophages located in T cell areas of the spleen and lymph node (Gordon, et al. 1994). The ligands and biological functions of the F4/80 antigen have not been fully determined but a role for F4/80 in the generation of efferent CD8+ve regulatory T cells is proposed (Lin, et al. 2005)</p> <p>Rat anti mouse F4/80 antibody, clone Cl:A3-1 modulates cytokine levels released in response to <i>Listeria monocytogenes</i> (Warschkau & Kiderlen, 1999).</p> <p>A Human anti-idiotypic Cl:A31 antibody, clone 17867 (HCA154) which binds to and blocks activity of Rat anti mouse F4/80 antibody, clone Cl:A3-1 is also available for use as a control in experiments utilizing clone A3-1.</p>
Flow Cytometry	Use 5µl of the suggested working dilution to label 10 ⁶ cells in 100µl. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.
References	<ol style="list-style-type: none"> Warschkau, H. & Kiderlen, A.F. (1999) A monoclonal antibody directed against the murine macrophage surface molecule F4/80 modulates natural immune response to <i>Listeria monocytogenes</i>. J Immunol. 163 (6): 3409-16. Moore, K.J. et al. (2000) Divergent response to LPS and bacteria in CD14-deficient murine macrophages. J Immunol. 165 (8): 4272-80. Brown, G.D. et al. (2002) Dectin-1 is a major beta-glucan receptor on macrophages. J Exp Med. 196: 407-12. Biffi, A. et al. (2004) Correction of metachromatic leukodystrophy in the mouse model by transplantation of genetically modified hematopoietic stem cells. J Clin Invest. 113:

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

Guarantee 12 months from date of despatch

Acknowledgements This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts

Health And Safety Information Material Safety Datasheet documentation #20471 available at: <https://www.bio-rad-antibodies.com/SDS/MCA497SBV51520471>

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