Datasheet: MCA1121

Description:	MOUSE ANTI HUMAN DENDRITIC CELLS
Specificity:	DENDRITIC CELLS/B CELLS
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	RFD1
Isotype:	IgM
Quantity:	0.2 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 (1)	▪			
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.

(1)**The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.**

Target Species

Human

Species Cross Reactivity

Reacts with: Macaque

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgM- liquid

Preparation	Purified IgM prepared by affinity chromatography
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN_3)
Approx. Protein Concentrations	IgM concentration 0.5 mg/ml
RRID	AB_322020
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the NS1 mouse myeloma cell line.
Specificity	**Mouse anti Human dendritic cells antibody, clone RFD1** recognizes an epitope within the class II MHC complex. In normal tissue mouse anti human dendritic cells antibody, clone RFD1 identifies dendritic cells and a proportion of B lymphocytes. Within the macrophage/dendritic cell populations the epitope seen by RFD1 is co-expressed with RFD7 by a subset of cells that exhibit suppressive activity on T cell stimulation.Mouse anti Human dendritic cells antibody, clone RFD1 does not bind to monocytes or cells of the granulocyte lineage. Mouse anti Human dendritic cells antibody, clone RFD1 has been used for the induction of apoptosis via MHC Class II cross linking of gastric mucosa epithelial cells (Fan *et al.* 1998).
References	1. Poulter, L.W. *et al.* (1986) Discrimination of human macrophages and dendritic cells by means of monoclonal antibodies. Scand J Immunol. 24 (3): 351-7. 2. Eckstein, A.K. *et al.* (2004) Thyroid associated ophthalmopathy: evidence for CD4(+) gammadelta T cells; *de novo* differentiation of RFD7(+) macrophages, but not of RFD1(+) dendritic cells; and loss of gammadelta and alphabeta T cell receptor expression. Br J Ophthalmol. 88: 803-8. 3. Hamilton, R.F. Jr. *et al.* (2004) Alveolar macrophages from systemic sclerosis patients: evidence for IL-4-mediated phenotype changes. Am J Physiol Lung Cell Mol Physiol. 286: L1202-9. 4. Rugtveit, J. *et al.* (1997) Differential distribution of B7.1 (CD80) and B7.2 (CD86) costimulatory molecules on mucosal macrophage subsets in human inflammatory bowel disease (IBD). Clin Exp Immunol. 110 (1): 104-13. 5. Leonard, C.T. *et al.* (2000) Dendritic cells and macrophages in lung allografts: A role in chronic rejection? Am J Respir Crit Care Med. 161: 1349-54. 6. Fan, X. *et al.* (1998) The effect of class II major histocompatibility complex expression on adherence of Helicobacter pylori and induction of apoptosis in gastric epithelial cells: a mechanism for T helper cell type 1-mediated damage. J Exp Med. 187: 1659-69. 7. Figueroa, D.J. *et al.* (2000) Expression of the type I diabetes-associated gene LRP5 in macrophages, vitamin A system cells, and the Islets of Langerhans suggests multiple potential roles in diabetes. J Histochem Cytochem. 48: 1357-68. 8. Kiekens, R.C. *et al.* (2001) Heterogeneity within tissue-specific macrophage and

dendritic cell populations during cutaneous inflammation in atopic dermatitis. Br J Dermatol. 145: 957-65.
9. Pantelidis, P. *et al.* (2001) Tumour necrosis factor-alpha production in fibrosing alveolitis is macrophage subset specific. Respir Res. 2: 365-72.
10. Fan, X. *et al.* (2000) *Helicobacter pylori* urease binds to class II MHC on gastric epithelial cells and induces their apoptosis. J Immunol. 165: 1918-24.
11. Li, T.F. *et al.* (2002) Dendritic cells in rheumatoid synovial membrane after total removal of the hyaline articular cartilage. Rheumatology (Oxford). 41: 319-23.
12. Bland, D.A. *et al.* (2006) H. pylori receptor MHC class II contributes to the dynamic gastric epithelial apoptotic response. World J Gastroenterol. 12: 5306-10.

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 #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgM (STAR138...)	Alk. Phos.
Human Anti Mouse IgM (HCA040...)	FITC
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP

Recommended Negative Controls

MOUSE IgM NEGATIVE CONTROL (MCA692)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M408180:221010'

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