## Datasheet: MCA80F BATCH NUMBER 165331

Description:	MOUSE ANTI HUMAN CD1a:FITC
Specificity:	CD1a
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	NA1/34-HLK
lsotype:	lgG2a
Quantity:	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 <u>www.bio-</u>							
	rad-antibodies.com/protocols.							
		Yes	No	Not Determined	Suggested Dilution			
	Flow Cytometry	-			Neat			
	Where this antibody han necessarily exclude its a guide only. It is recor system using appropria	use in such p mmended that	rocedur the use	es. Suggested working r titrates the antibody	g dilutions are given as			
Target Species	Human							
Species Cross Reactivity	Reacts with: Dog, Cynomolgus monkey <b>N.B.</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 IgG conjugate	d to Fluoresce	in Isothi	ocyanate Isomer 1 (Fl	TC) - liquid.			
Max Ex/Em	Fluorophore FITC	Excitation Ma 490	x (nm)	Emission Max (nm) 525				
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant							
Buffer Solution	Phosphate buffered sa	lline						

Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	Human thymocytes
External Database Links	UniProt: <u>P06126</u> <u>Related reagents</u> Entrez Gene: <u>909</u> CD1A <u>Related reagents</u>
RRID	AB_321222
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the NS1/1 Ag4.1 mouse myeloma cell line
Specificity	<b>Mouse anti Human CD1a antibody, clone NA1/34-HLK</b> recognizes the human CD1a cell surface glycoprotein, a ~49 kDa single pass type 1 transmembrane glycoprotein containing a single Ig-like domain, expressed in association with beta 2 microglobulin. CD1a is expressed strongly by cortical thymocytes, and also by Langerhans cells and interdigitating cells. CD1a is involved in the presentation of lipids and glycolipids to NK cells (Sloma <i>et al.</i> 2008).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
References	<ol> <li>Poulter, L.W. <i>et al.</i> (1986) Discrimination of human macrophages and dendritic cells by means of monoclonal antibodies. <u>Scand J Immunol. 24 (3): 351-7.</u></li> <li>Scheinecker, C. <i>et al.</i> (1998) Initiation of the autologous mixed lymphocyte reaction requires the expression of costimulatory molecules B7-1 and B7-2 on human peripheral blood dendritic cells. <u>J Immunol. 161: 3966-73.</u></li> <li>Murray, S. <i>et al.</i> (2000) Diagnostic and therapeutic evaluation of an anti-Langerhans cell histiocytosis monoclonal antibody (NA1/34) in a new xenograft model. <u>J Invest</u> <u>Dermatol. 114: 127-34.</u></li> <li>Buettner, M. <i>et al.</i> (2005) Inverse correlation of maturity and antibacterial activity in human dendritic cells. <u>J Immunol. 174: 4203-9.</u></li> <li>Cox, K. <i>et al.</i> (2005) Plasmacytoid dendritic cells (PDC) are the major DC subset innately producing cytokines in human lymph nodes. <u>J Leukoc Biol. 78: 1142-52.</u></li> <li>Angel, C.E. <i>et al.</i> (2007) Characterization of canine monocyte-derived dendritic cells with phenotypic and functional differentiation. <u>Can J Vet Res. 71: 165-74.</u></li> <li>Angel, C.E. <i>et al.</i> (2007) Comprehensive analysis of MHC-II expression in healthy human skin. <u>Immunol Cell Biol. 85: 363-9.</u></li> <li>Angel, C.E. <i>et al.</i> (2007) CD14+ antigen-presenting cells in human dermis are less</li> </ol>

mature than their CD1a+ counterparts. Int Immunol. 19: 1271-9.

10. Elia, A.R. et al. (2008) Human dendritic cells differentiated in hypoxia down-modulate
antigen uptake and change their chemokine expression profile. <u>J Leukoc Biol. 84:</u>
<u>1472-82.</u>

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16. Kaldensjö, T. *et al.* (2011) Detection of intraepithelial and stromal Langerin and CCR5 positive cells in the human endometrium: potential targets for HIV infection. <u>PLoS One. 6:</u> e21344.

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 Baharom, F. *et al.* (2016) Dendritic Cells and Monocytes with Distinct Inflammatory Responses Reside in Lung Mucosa of Healthy Humans. <u>J Immunol. 196 (11): 4498-509</u>.
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 Guilliams, M. *et al.* (2016) Unsupervised High-Dimensional Analysis Aligns Dendritic Cells across Tissues and Species. <u>Immunity. 45 (3): 669-84.</u>

StorageThis product is shipped at ambient temperature. It is recommended to aliquot and store at<br/>-20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for<br/>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. This product is photosensitive and should be protected from light.

Guarantee 12 months from date of despatch

 Health And Safety
 Material Safety Datasheet documentation #10041 available at:

 Information
 https://www.bio-rad-antibodies.com/SDS/MCA80F

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Regulato	<b>ry</b> For res	earch purpose			
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Recomn	nended Negative (	Controls			
MOUSE lo	G2a NEGATIVE CONT	ROL:FITC (MCA	<u>A929F)</u>		
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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 'M405641:220916'

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