

## Datasheet: MCA80GA

<b>Description:</b>	MOUSE ANTI HUMAN CD1a
<b>Specificity:</b>	CD1a
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	NA1/34-HLK
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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 [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/50 - 1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Immunofluorescence	▪			

Where this antibody 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 antibody for use in their own system using appropriate/positive controls.

### Target Species

Human

### Species Cross Reactivity

Reacts with: Dog, Cynomolgus monkey

**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 IgG - liquid

### Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Human thymocytes
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P06126</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">909</a>    CD1A    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_324090
<b>Fusion Partners</b>	Spleen cells from immunized BALB/c mice were fused with cells of the NS1/1 Ag4.1 mouse myeloma cell line
<b>Specificity</b>	<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).
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>Histology Positive Control Tissue</b>	Skin
<b>References</b>	<ol style="list-style-type: none"> <li>1. Poulter, L.W. <i>et al.</i> (1986) Discrimination of human macrophages and dendritic cells by means of monoclonal antibodies. <a href="#">Scand J Immunol. 24 (3): 351-7.</a></li> <li>2. 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. <a href="#">J Immunol. 161: 3966-73.</a></li> <li>3. 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. <a href="#">J Invest Dermatol. 114: 127-34.</a></li> <li>4. Buettner, M. <i>et al.</i> (2005) Inverse correlation of maturity and antibacterial activity in human dendritic cells. <a href="#">J Immunol. 174: 4203-9.</a></li> <li>5. Cox, K. <i>et al.</i> (2005) Plasmacytoid dendritic cells (PDC) are the major DC subset innately producing cytokines in human lymph nodes. <a href="#">J Leukoc Biol. 78: 1142-52.</a></li> <li>6. Angel, C.E. <i>et al.</i> (2006) Distinctive localization of antigen-presenting cells in human</li> </ol>

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  17. Bosco, M.C. *et al.* (2011) Hypoxia modulates the gene expression profile of immunoregulatory receptors in human mature dendritic cells: identification of TREM-1 as a novel hypoxic marker *in vitro* and *in vivo*. [Blood. 117: 2625-39.](#)
  18. Baharom, F. *et al.* (2016) Dendritic Cells and Monocytes with Distinct Inflammatory Responses Reside in Lung Mucosa of Healthy Humans. [J Immunol. 196 \(11\): 4498-509.](#)
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**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.

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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA80GA">https://www.bio-rad-antibodies.com/SDS/MCA80GA</a> 10040
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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](https://www.bio-rad-antibodies.com/datasheets)  
'M383135:210513'

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