Datasheet: MCA80PE

Description:	MOUSE ANTI HUMAN CD1a:RPE
Specificity:	CD1a
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	NA1/34-HLK
Isotype:	IgG2a
Quantity:	100 TESTS

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 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 negative/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 conjugated to R. Phycoerythrin (RPE) - lyophilized

Reconstitution

Reconstitute with 1 ml distilled water.

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

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 1.0% Bovine Serum Albumin 5% Sucrose
Immunogen	Human thymocytes
External Database Links	**UniProt:** P06126 Related reagents **Entrez Gene:** 909 CD1A Related reagents
RRID	AB_321223
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the NS1/1 Ag4.1 mouse myeloma cell line
Specificity	**Mouse anti Human CD1a antibody, clone NA1/34-HLK** 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 *et al.* 2008).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
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. Scheinecker, C. *et al.* (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. J Immunol. 161: 3966-73. 3. Murray, S. *et al.* (2000) Diagnostic and therapeutic evaluation of an anti-Langerhans cell histiocytosis monoclonal antibody (NA1/34) in a new xenograft model. J Invest Dermatol. 114: 127-34. 4. Buettner, M. *et al.* (2005) Inverse correlation of maturity and antibacterial activity in human dendritic cells. J Immunol. 174: 4203-9. 5. Cox, K. *et al.* (2005) Plasmacytoid dendritic cells (PDC) are the major DC subset innately producing cytokines in human lymph nodes. J Leukoc Biol. 78: 1142-52. 6. Angel, C.E. *et al.* (2006) Distinctive localization of antigen-presenting cells in human lymph nodes. Blood. 113: 1257-67. 7. Wang, Y.S. *et al.* (2007) Characterization of canine monocyte-derived dendritic cells with phenotypic and functional differentiation. Can J Vet Res. 71: 165-74. 8. Angel, C.E. *et al.* (2007) Comprehensive analysis of MHC-II expression in healthy human skin. Immunol Cell Biol. 85: 363-9. 9. Angel, C.E. *et al.* (2007) CD14+ antigen-presenting cells in human dermis are less

mature than their CD1a+ counterparts. Int Immunol. 19: 1271-9.
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20. Zegarska, B. *et al.* (2017) Changes of Langerhans cells during skin ageing. Postepy Dermatol Alergol. 34 (3): 260-7.
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Storage	Prior to reconstitution store at +4°C. Following reconstitution store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA80PE

	20487
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL:RPE (MCA929PE)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

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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
'M419590:230616'

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