

APC anti-human CD1c Antibody

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| Catalog# / Size | 331523 / 25 tests 331524 / 100 tests |
| Clone | L161 |
| Regulatory Status | RUO |
| Workshop | V T-CD01.18 |
| Other Names | R7, M241, BDCA-1 |
| Isotype | Mouse IgG1, κ |
| Description | CD1c, also known as R7 or M241, is a 43 kD member of the five CD1 antigens (CD1a-e) in humans. The CD1 molecules are type I glycoprotein with structural similarities to MHC class I and are non-covalently associated with β_2 -microglobulin, belonging to the Ig superfamily. CD1c is expressed on cortical thymocytes, Langerhans cells, dendritic cells, and a subset of B cells. It has been reported that CD1c is also expressed on mature T cells in a tightly regulated manner. CD1c is involved in antigen-presentation of glycolipids. It may also act in T cells as an immune regulatory molecule. |

Product Details

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| Verified Reactivity | Human |
| Reported Reactivity | African Green, Baboon, Cynomolgus, Rhesus |
| Antibody Type | Monoclonal |
| Host Species | Mouse |
| Formulation | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA) |
| Preparation | The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions. |
| Concentration | Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.) |
| Storage & Handling | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze. |
| Application | FC - Quality tested |
| Recommended Usage | Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 μ l per million cells in 100 μ l staining volume or 5 μ l per 100 μ l of whole blood. |
| Excitation Laser | Red Laser (633 nm) |
| Application Notes | Additional reported applications (for the relevant formats) include: immunohistochemical staining on frozen tissue ^{4,5} , formalin-fixed paraffin-embedded immunohistochemical staining ⁶ , and spatial biology (IBEX) ^{7,8} . |
| Application References | <ol style="list-style-type: none"> del C Salamone M, <i>et al.</i> 2001. <i>J Leukoc Biol.</i> 70:567. de Fraissinette A, <i>et al.</i> 1988. <i>Exp Hematol.</i> 16:764. Li D, <i>et al.</i> 2012. <i>J Exp Med.</i> 209:109. PubMed Xu C, <i>et al.</i> 2010. <i>Am J Hematol.</i> 85:539 (IHC-F) Gerlini G, <i>et al.</i> 2001. <i>J Invest Dermatol.</i> 117:576 (IHC-F) Poposki J, <i>et al.</i> 2016. <i>Clin Exp Allergy</i> 45:384 (IHC-P) PubMed Radtke AJ, <i>et al.</i> 2020. <i>Proc Natl Acad Sci USA.</i> 117:33455-33465. (SB) PubMed Radtke AJ, <i>et al.</i> 2022. <i>Nat Protoc.</i> 17:378-401. (SB) PubMed |
| (PubMed link indicates BioLegend citation) | |
| Product Citations | <ol style="list-style-type: none"> Schröder M, <i>et al.</i> 2016. <i>PLoS One.</i> 11: 0157387. PubMed |

2. Laing AG, *et al.* 2020. *Nat Med.* 26:1623. [PubMed](#)
3. Tang-Huau TL, *et al.* 2018. *Nat Commun.* 9:2570. [PubMed](#)
4. Adhikaree J, *et al.* 2019. *Oncoimmunology.* 8:1593803. [PubMed](#)
5. Escudero-Pérez B, *et al.* 2019. *JCI Insight.* 4:e126070. [PubMed](#)

RRID AB_10718511 (BioLegend Cat. No. 331523)
 AB_10719956 (BioLegend Cat. No. 331524)

Antigen Details

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| Structure | 43 kD, Ig superfamily, MHC I-like molecule, associates with β 2-microglobulin |
| Distribution | B cell subset, cortical thymocytes, dendritic cells, and Langerhans cells |
| Function | Presents lipid antigen to CD1c-restricted T cells |
| Ligand/Receptor | CD1c-restricted TCR |
| Cell Type | B cells, Dendritic cells, Langerhans cells, Thymocytes |
| Biology Area | Immunology |
| Molecular Family | CD Molecules |
| Antigen References | <ol style="list-style-type: none"> 1. Fainboim LM and del C. Salamone. 2002. <i>J. Biol. Reg. Homeos. Ag.</i> 16:125. 2. M. del Salamone C, <i>et al.</i> 2001. <i>J. Leukocyte Biol.</i> 70:567. 3. Zola H, <i>et al.</i> Eds. 2007. <i>Leukocyte and Stromal Cell Molecules: The CD Markers.</i> P42. |
| Gene ID | 911 |

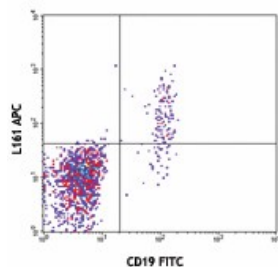
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

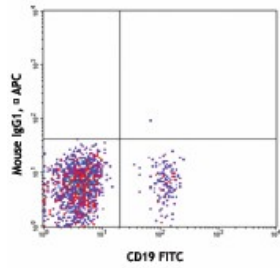
Other Formats

PerCP anti-human CD1c, Purified anti-human CD1c, Biotin anti-human CD1c, PE anti-human CD1c, Pacific Blue™ anti-human CD1c, Alexa Fluor® 647 anti-human CD1c, PerCP/Cyanine5.5 anti-human CD1c, Brilliant Violet 421™ anti-human CD1c, PE/Cyanine7 anti-human CD1c, FITC anti-human CD1c, APC/Cyanine7 anti-human CD1c, APC anti-human CD1c, Alexa Fluor® 488 anti-human CD1c, Alexa Fluor® 700 anti-human CD1c, PE/Dazzle™ 594 anti-human CD1c, Brilliant Violet 510™ anti-human CD1c, Brilliant Violet 605™ anti-human CD1c, Brilliant Violet 711™ anti-human CD1c, TotalSeq™-A0160 anti-human CD1c, Brilliant Violet 650™ anti-human CD1c, Brilliant Violet 785™ anti-human CD1c, APC/Fire™ 750 anti-human CD1c, TotalSeq™-C0160 anti-human CD1c, TotalSeq™-B0160 anti-human CD1c, TotalSeq™-D0160 anti-human CD1c, PE/Cyanine5 anti-human CD1c

Product Data



Human peripheral blood lymphocytes were stained with CD19 FITC and CD1c (clone L161) APC (top) or Mouse IgG1, κ APC isotype control (bottom).



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