

1A-752-T100

Monoclonal Antibody to CD1c Allophycocyanin (APC) conjugated (100 tests)

Clone:	L161
Isotype:	Mouse IgG1
Specificity:	The mouse monoclonal antibody L161 recognizes CD1c, (R7), a 43 kDa type I glycoprotein associated with beta2-microglobulin. It is expressed on cortical thymocytes (strongly), Langerhans cells, dendritic cells, B and some T cells.
Regulatory Status:	RUO
Immunogen:	human thymocytes
Species Reactivity:	Human
Preparation:	The purified antibody is conjugated with cross-linked Allophycocyanin (APC) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Storage Buffer:	The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
Storage / Stability:	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.
Usage:	The reagent is designed for Flow Cytometry analysis of human blood cells using 10 µl reagent / 100 µl of whole blood or 10 ⁶ cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.
Expiration:	See vial label
Lot Number:	See vial label
Background:	CD1c (also known as R7 or BDCA1) together with CD1a and b, belongs to group 1 of CD1 antigens. These non-classical MHC-like glycoproteins serve as antigen-presenting molecules for a subset of T cells that responds to specific lipids and glycolipids found in the cell walls of bacterial pathogens or self-glycolipid antigens such as gangliosides, and they have also roles in antiviral immunity. The trafficking routes of the particular CD1 types differ and correspond to their ability to bind and present different groups of antigens. CD1c is unique in its ability to present e.g. mycobacterial phosphoketides and polyisoprenoids. CD1c is the only CD1 isoform that has been shown to interact both with alpha/beta and gamma/delta T cells.

For laboratory research only, not for drug, diagnostic or other use.

**Antibodies****References:**

- *del C Salamone M, Mendiguren AK, Salamone GV, Fainboim L: Membrane trafficking of CD1c on activated T cells. *J Leukoc Biol.* 2001 Oct;70(4):567-77.
- *Briken V, Jackman RM, Watts GF, Rogers RA, Porcelli SA: Human CD1b and CD1c isoforms survey different intracellular compartments for the presentation of microbial lipid antigens. *J Exp Med.* 2000 Jul 17;192(2):281-8.
- *Gutzeit C, Raftery MJ, Peiser M, Tischler KB, Ulrich M, Eberhardt M, Stockfleth E, Giese T, Sauerbrei A, Morita CT, Schönrich G: Identification of an important immunological difference between virulent varicella-zoster virus and its avirulent vaccine: viral disruption of dendritic cell instruction. *J Immunol.* 2010 Jul 1;185(1):488-97.
- *Scharf L, Li NS, Hawk AJ, Garzón D, Zhang T, Fox LM, Kazen AR, Shah S, Haddadian EJ, Gumperz JE, Saghatelian A, Faraldo-Gómez JD, Meredith SC, Piccirilli JA, Adams EJ: The 2.5 Å structure of CD1c in complex with a mycobacterial lipid reveals an open groove ideally suited for diverse antigen presentation. *Immunity.* 2010 Dec 14;33(6):853-62.
- *Todate A, Chida K, Suda T, Imokawa S, Sato J, Ide K, Tsuchiya T, Inui N, Nakamura Y, Asada K, Hayakawa H, Nakamura H: Increased numbers of dendritic cells in the bronchiolar tissues of diffuse panbronchiolitis. *Am J Respir Crit Care Med.* 2000 Jul;162(1):148-53.
- *Xu C, de Vries R, Visser L, Diepstra A, Gadola SD, Poppema S, van den Berg A: Expression of CD1d and presence of invariant NKT cells in classical Hodgkin lymphoma. *Am J Hematol.* 2010 Jul;85(7):539-41. doi: 10.1002/ajh.21743.

Unless indicated otherwise, all products are For Research Use Only and not for diagnostic or therapeutic use. Not for resale or transfer either as a stand-alone product or as a component of another product without written consent of EXBIO. EXBIO will not be held responsible for patent infringement or other violations that may occur with the use of our products. All orders are accepted subject to EXBIO's term and conditions which are available at www.exbio.cz.

For laboratory research only, not for drug, diagnostic or other use.

EXBIO Praha | Nad Safinou II 341 | 252 50 Vestec u Prahy | Czech Republic
Tel: +420 261 090 666 | Fax: +420 261 090 660 | orders@exbio.cz | www.exbio.cz