

**Pacific Blue™ anti-human CD1a**

**Catalog # / Size:** 2100585 / 25 µg  
 2100590 / 100 µg  
 2100620 / 100 tests

**Clone:** HI149

**Isotype:** Mouse IgG1, κ

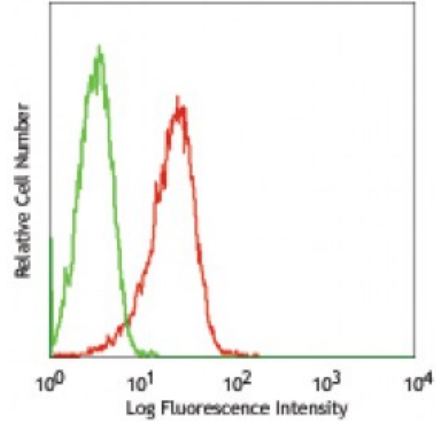
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Pacific Blue™ under optimal conditions. The solution is free of unconjugated Pacific Blue™.

**Formulation:** test size: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).  
 microg sizes: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Workshop Number:** V CD01.01

**Concentration:** test size: lot-specific; microg sizes: 0.5 mg/ml



Human T leukemia cell line, Molt-4, stained with HI149 Pacific Blue™

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis.

**For test size**, the suggested use of this reagent for immunofluorescent staining is 5 microL per 10<sup>6</sup> cells in 100 microL volume.

**For microg sizes**, the suggested use of this reagent for immunofluorescent staining is <0.5 microg per 10<sup>6</sup> cells in 100 microL volume.

It is recommended that the reagent be titrated for optimal performance for each application.

\* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections.

- Application References:**
- Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.
  - Knapp W. 1989. Leucocyte Typing IV. Oxford University Press New York.
  - Patton KM, *et al.* 2005. *Infect. Immun.*73:2083. [PubMed](#)
  - Curti A, *et al.* 2010. *Haematologica.* 95:2022. [PubMed](#)

**Description:** CD1a is a 49 kD member of the immunoglobulin superfamily also known as T6 and R4. It is a type I membrane glycoprotein with structural similarities to MHC class I and is non-covalently associated with β<sub>2</sub>-microglobulin. CD1a plays a role in non-

peptide glycolipid antigen presentation to CD1-restricted T cells. It is expressed on cortical double positive and single positive thymocytes, Langerhans cells, and dendritic cells. In addition to antigen presentation, CD1a has been implicated in thymic T cell development.

**Antigen**  
**References:**

1. Blumberg RS, *et al.* 1995. *Immunol. Rev.* 147:5.
2. Calabi F, *et al.* 1991. *Tissue Antigens* 37:1.
3. Melian A, *et al.* 1996. *Curr. Opin. Immunol.* 8:82.