

## Pacific Blue™ anti-human CD1a

**Catalog # / Size:** 300117 / 25 µg  
300118 / 100 µg  
300124 / 100 tests

**Clone:** HI149

**Isotype:** Mouse IgG1, κ

**Workshop Number:** V CD01.01

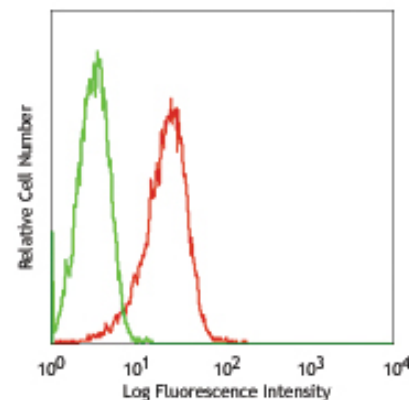
**Reactivity:** Human

**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).  
µg sizes: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

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

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



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

## Applications:

**Applications:** FC - Quality tested

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

\*\* Pacific Blue™ is a registered trademark of Molecular Probes, Inc. Pacific Blue™ dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

**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:**

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

### Related Products:Product

Pacific Blue™ Mouse IgG1, κ Isotype Ctrl  
Cell Staining Buffer  
RBC Lysis Buffer (10X)  
Human TruStain FcX™ (Fc Receptor Blocking Solution)

**Clone**  
MOPC-21

**Application**  
FC, ICFC  
FC, ICC, ICFC  
FC, ICFC  
FC, ICC, ICFC



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