## **Product Data Sheet**

## PE/Dazzle™ 594 anti-human CD1a

**Catalog # / Size:** 2100660 / 100 tests

2100655 / 25 tests

Clone: HI149

**Isotype:** Mouse IgG1, κ

Reactivity: Human

**Preparation:** The antibody was purified by affinity

chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and

unconjugated antibody.

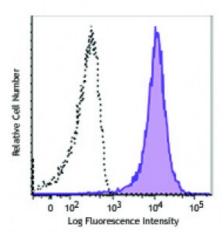
Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Workshop Number: V CD01.01

Concentration: Lot-specific



Human T leukemia cell line (MOLT-4) was stained with CD1a (clone HI149) PE/Dazzle™ 594 (filled histogram) or mouse IgG1, κ PE/Dazzle™ 594 isotype control (open histogram).

## **Applications:**

**Applications:** Flow Cytometry

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 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* PE/Dazzle  $^{\scriptscriptstyle\mathsf{TM}}$  594 has a maximum excitation of 566 nm and a maximum emission

of 610 nm.

Application Notes:

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

Application References:

1. Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.

2. Knapp W. 1989. Leucocyte Typing IV. Oxford University Press New York.

3. Patton KM, et al. 2005. Infect. Immun.73:2083. PubMed 4. 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  $\beta_2$ -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.

nces: 2. Calabi F, et al. 1991. Tissue Antigens 37:1.

3. Melian A, et al. 1996. Curr. Opin. Immunol. 8:82.