

**APC/Fire™ 750 anti-human CD1a**

**Catalog # / Size:** 2100710 / 100 tests  
2100705 / 25 tests

**Clone:** HI149

**Isotype:** Mouse IgG1, κ

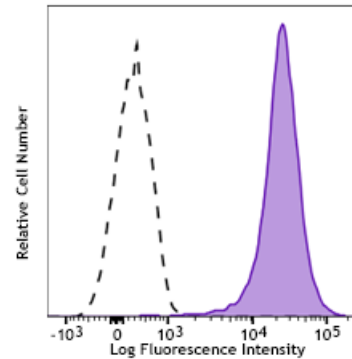
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with APC/Fire™ 750 under optimal conditions.

**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) APC/Fire™ 750 (filled histogram) or mouse IgG1, κ APC/Fire™ 750 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 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.

\* APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 nm.

**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.