10⁴



Product Data Sheet

102

Log Fluoresence Intensity

Human T lymphoblastic leukemia cell line Molt-4 stained with HI149 Alexa

103

Relative Cell Number

100

Fluor® 700

Alexa Fluor® 700 anti-human CD1a

Catalog # / Size: 300120 / 100 µg

Clone: HI149

Isotype: Mouse IgG1, κ Workshop Number: V CD01.01

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with

Alexa Fluor® 700 under optimal conditions. The solution is free of

unconjugated Alexa Fluor® 700.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 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.



Applications: FC - Quality tested

Recommended Usage: This reagent is developed for immunofluorescent staining for flow cytometric

analysis; the suggested use of this reagent is ≤1.0 µg per million cells in 100 µl volume. It is highly recommended that the reagent be titrated for optimal

performance for each application.

* Alexa Fluor® 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor® 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

** Alexa Fluor® 700 is a registered trademark of Molecular Probes, Inc. Alexa Fluor® 700 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.

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. **Application References:**

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 β_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.

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

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

Related Products: Product Clone Application

Cell Staining Buffer FC, ICC, ICFC RBC Lysis Buffer (10X)

FC, ICFC FC, ICFC Alexa Fluor® 700 Mouse IgG1, κ Isotype Ctrl MOPC-21 FC, ICC, ICFC

Human TruStain FcX™ (Fc Receptor Blocking Solution)



