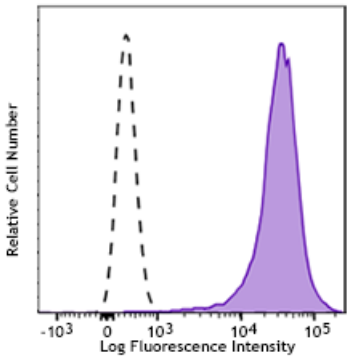
SONY

Product Data Sheet

Brilliant Violet 711™ anti-human CD1a

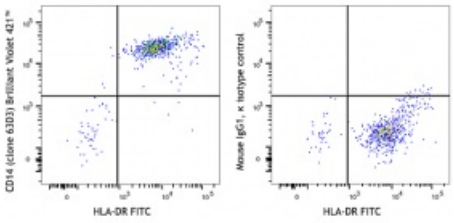
Catalog # / Size:	2100700 / 100 tests 2100695 / 25 tests
Clone:	HI149
Isotype:	Mouse IgG1, κ
Immunogen:	Yeast-expressed, recombinant mouse GM-CSF
Reactivity:	Human
Preparation:	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 711™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 711™ and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
Workshop Number:	V CD01.01
Concentration:	Lot-specific



Human T leukemia cell line (MOLT-4) was stained with CD1a (clone HI149) Brilliant Violet 711™ (filled histogram) or mouse IgG1, κ Brilliant Violet 711™ isotype control (open histogram).

Applications:

Applications:	Flow Cytometry



Human peripheral blood monocytes were stained with HLA-DR FITC and Brilliant Violet 421™ anti-human CD14 (clone 63D3) (left) or Brilliant Violet 421™ mouse IgG1, κ isotype control (right).

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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.

Brilliant Violet 711™ excites at 405 nm and emits at 711 nm. The bandpass filter 710/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 711™ is a trademark of Sirigen Group Ltd.

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 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.