Product Data Sheet

PE anti-human CD1d

Catalog # / Size: 2351525 / 25 tests

2351530 / 100 tests

Clone: 51.1

Isotype: Mouse IgG2b, κ

Immunogen: Human CD1d-Fc fusion

Reactivity: Human

Preparation: The antibody was purified by affinity

chromatography and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and

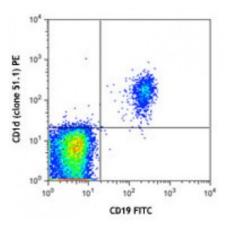
unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

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

Concentration: Lot-specific



Human peripheral blood lymphocytes were stained with CD19 FITC and CD1d (clone 51.1) PE (top) or mouse lgG2b, κ PE isotype control (bottom).

Applications:

Applications: Flow Cytometry

Recommended

Usage:

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis.

Test size products are transitioning from 20 microL to 5 microL per test. Please check your vial or your CoA to

find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

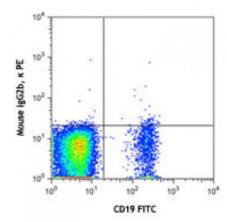
Application Notes:

Additional reported application (for the

relevant formats) include:

immunohistochemical staining of frozen tissue sections1, Western blotting^{1,2}, and induction of IL-12 production by

crosslinking of CD1d3.



Application References:

1. Exley M, et al. 2000. Immunology 100:37. (IHC, WB)

2. Durante-Mangoni E, et al. 2004. J. Immunol. 173:2159. (WB)

3. Yue SC, et al. 2005. P. Natl. Acad. Sci. USA 102:11811. (Stim)

Description:

CD1d is a MHC-like, type I transmembrane protein, member of the CD1 family and the immunoglobulin superfamily. On the cell surface, CD1d forms a heterodimer with $\beta 2\text{-microglobulin}$. CD1d is expressed by antigen-presenting cells such as B cells, monocytes/macrophages, dendritic cells, and some non-lymphoid cells. Cortical thymocytes express CD1d but the expression is lost in mature T cells. CD1d presents lipid antigens to NKT cells analogous to MHC molecule

presentation of peptides to T cells.

Antigen References:

- 1. Koch M, et al. 2005. Nat. Immunol. 6:819.
- 2. Liu X, et al. 2010. P. Natl. Acad. Sci. USA 107:13010.
- 3. Zeissig S, et al. 2010. J. Clin. Invest. 120:2889.
- 4. Teige A, et al.