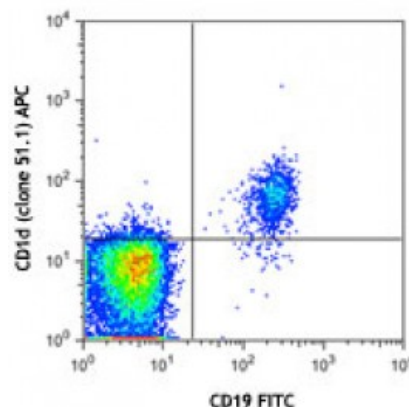


## APC anti-human CD1d

<b>Catalog # / Size:</b>	2351535 / 25 tests 2351540 / 100 tests
<b>Clone:</b>	51.1
<b>Isotype:</b>	Mouse IgG2b, $\kappa$
<b>Immunogen:</b>	Human CD1d-Fc fusion
<b>Reactivity:</b>	Human
<b>Preparation:</b>	The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and unconjugated antibody.
<b>Formulation:</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).
<b>Concentration:</b>	Lot-specific



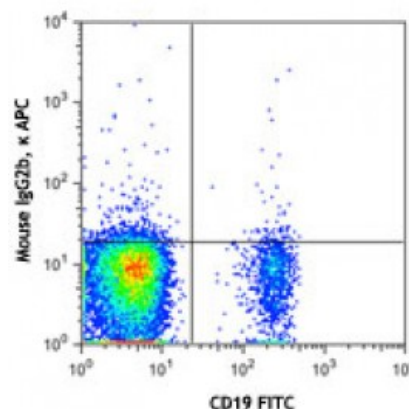
Human peripheral blood lymphocytes were stained with CD19 FITC and CD1d (clone 51.1) APC (top) or mouse IgG2b,  $\kappa$  APC isotype control (bottom).

## Applications:

<b>Applications:</b>	Flow Cytometry
<b>Recommended Usage:</b>	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. <b>Test size products are transitioning from 20 microL to 5 microL per test.</b> 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 sections<sup>1</sup>, Western blotting<sup>1,2</sup>, and induction of IL-12 production by crosslinking of CD1d<sup>3</sup>.

<b>Application References:</b>	1. Exley M, <i>et al.</i> 2000. <i>Immunology</i> 100:37. (IHC, WB) 2. Durante-Mangoni E, <i>et al.</i> 2004. <i>J. Immunol.</i> 173:2159. (WB) 3. Yue SC, <i>et al.</i> 2005. <i>P. Natl. Acad. Sci. USA</i> 102:11811. (Stim) 4. van der Vlugt LE, <i>et al.</i> 2014. <i>J Infect Dis.</i> <a href="#">PubMed</a>
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**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-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.*