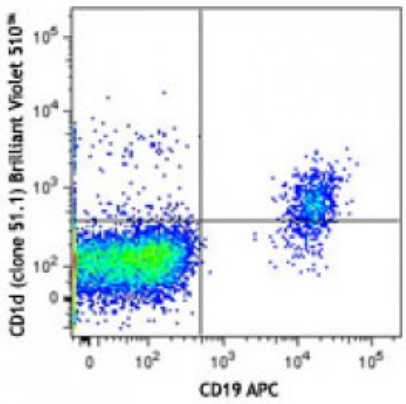
SONY

Product Data Sheet

Brilliant Violet 510™ anti-human CD1d

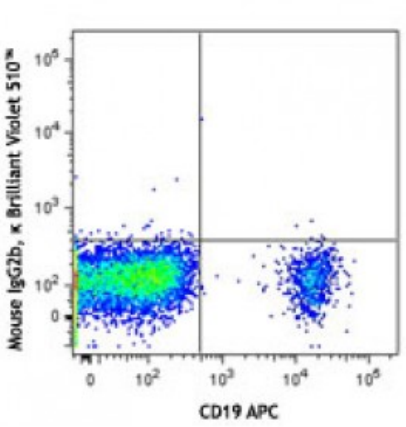
Catalog # / Size:	2351570 / 100 tests
Clone:	51.1
Isotype:	Mouse IgG2b, κ
Immunogen:	Human CD1d-Fc fusion
Reactivity:	Human
Preparation:	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 510™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 510™ and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
Concentration:	Lot-specific



Human peripheral blood lymphocytes were stained with CD19 APC and CD1d (clone 51.1) Brilliant Violet 510™ (top) or mouse IgG2b, κ Brilliant Violet 510™ 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. For flow cytometric staining, the suggested use of this reagent is ≤5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Brilliant Violet 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 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 510™ is a trademark of Sirigen Group Ltd. This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research



purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

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 β2-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 iNKT 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.*