

TECHNICAL DATA SHEET

CyFlow™ CD1b FITC Anti-Hu; Clone SN13

REF BN254204

For Research Use Only.
Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD1b
Alternative Names	R1, CD1
Clone	SN13
Clonality	monoclonal
Format	FITC
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	A cell membrane antigen preparation that was isolated from normal human thymocytes

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

Specificity

The mouse monoclonal antibody SN13 (K5-1B8) recognizes CD1b antigen, a 44 kDa type I glycoprotein associated with β 2-microglobulin. It is expressed on dendritic cells, Langerhans cells, thymocytes, and T acute lymphoblastic leukemia cells.

Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 4 μ l reagent / 100 μ l of whole blood or 10^6 cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH $\approx$ 7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

CD1b (R1) together with CD1a and CD1c, belongs to group 1 of CD1 antigens. These non-classical MHC-like glycoproteins serve as antigen-presenting molecules for a subset of T cells that responds to specific lipids and glycolipids found in the cell walls of bacterial pathogens or self-glycolipid antigens such as gangliosides, and they have also roles in antiviral immunity. The trafficking routes of the particular CD1 types differ and correspond to their ability to bind and present different groups of antigens. Besides non-peptide glycolipid antigen presentation to CD1-restricted T cells, CD1b has been implicated in thymocyte development.

References

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- Tentori L, Graziani G, Porcelli SA, Sugita M, Brenner MB, Madaio R, Bonmassar E, Giuliani A, Aquino A: Rifampin increases cytokine-induced expression of the CD1b molecule in human peripheral blood monocytes. Antimicrob Agents Chemother. 1998 Mar; 42(3):550-4. < PMID: 9517931 >
- Giuliani A, Prete SP, Graziani G, Aquino A, Balduzzi A, Sugita M, Brenner MB, Iona E, Fattorini L, Orefici G, Porcelli SA, Bonmassar E: Influence of Mycobacterium bovis bacillus Calmette Guérin on in vitro induction of CD1 molecules in human adherent mononuclear cells. Infect Immun. 2001 Dec; 69(12):7461-70. < PMID: 11705921 >
- Hayes SM, Knight KL: Group 1 CD1 genes in rabbit. J Immunol. 2001 Jan 1; 166(1):403-10. < PMID: 11123318 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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