

30-2858: Anti-Human CD1d PE MAb (Clone: 51.1)

Clonality :	Monoclonal
Clone Name :	51.1
Application :	FACS
Reactivity :	Human,Non-Human Primates
Conjugate :	PE
Gene :	CD1D
Gene ID :	912
Uniprot ID :	P15813
Alternative Name :	CD1d molecule
Isotype :	Mouse IgG2b kappa
Immunogen Information :	human CD1d

Description

Specificity: The mouse monoclonal antibody 51.1 recognizes an extracellular epitope of CD1d, a 38 kDa transmembrane glycoprotein expressed mainly on cortical thymocytes, marginal zone B cells and other antigen presenting cells, but also in e.g. hepatitis C virus-infected livers.

CD1d belongs to CD1 family of transmembrane glycoproteins, associated with beta2 microglobulin, similarly to MHC I molecules. Unlike other CD1 family members, however, CD1d can be also expressed in a non-glycosylated form, which is not associated with beta2 microglobulin. Hence it is not certain how much CD1d plays a role in the presentation of microbial lipid antigens during infection. On the other hand, it is expressed on various antigen presenting cell types. Besides it, CD1d+ thymocytes are involved in the positive selection of sublineage of NKT cells.

Product Info

Amount :	100 tests (T100)
Purification :	Purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. Unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
Content :	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide.
Storage condition :	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Application Note

Flow cytometry: The reagent is designed for analysis of human blood cells using 10 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

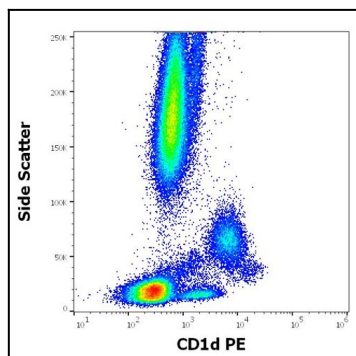


Fig1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD1d (51.1) PE antibody (10 μ l reagent / 100 μ l of peripheral whole blood).

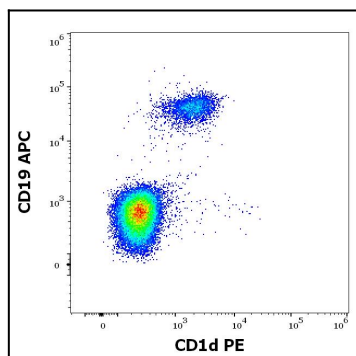


Fig2: Flow cytometry multicolor surface staining of human gated lymphocytes stained using anti-human CD1d (51.1) PE antibody (10 μ l reagent / 100 μ l of peripheral whole blood) and anti-human CD19 (LT19) APC antibody (10 μ l reagent / 100 μ l of peripheral whole blood).

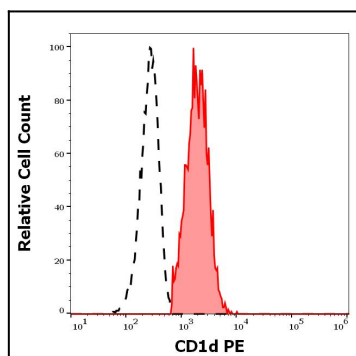


Fig3: Separation of human CD1d positive CD19 positive lymphocytes (red-filled) CD1d negative CD19 negative lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD1d (51.1) PE antibody (10 μ l reagent / 100 μ l of peripheral whole blood).