

30-1018PE-Cy7: Anti-CD54 / ICAM-1 Monoclonal Antibody (Clone:1H4) PE-Cy™ 7 conjugated

Clonality :	Monoclonal
Clone Name :	1H4
Application :	FACS
Reactivity :	Human
Conjugate :	PE/CY7
Gene :	ICAM1
Gene ID :	3383
Uniprot ID :	P05362
Alternative Name :	ICAM1, ICAM-1, BB2, P3.58
Isotype :	Mouse IgG2b
Immunogen Information :	Raji cells and spleen cells fused with NS1 cells

Description

Specificity: The antibody 1H4 recognizes an extracellular epitope of CD54 (ICAM-1), a 85-110 kDa type I transmembrane glycoprotein (receptor for rhinovirus) expressed on activated endothelial cells, T lymphocytes, B lymphocytes, monocytes, macrophages, granulocytes and dendritic cells; the expression of CD54 is upregulated by activation.

Description: CD54 (ICAM-1) is a 90 kD member of the C2 subset of immunoglobulin superfamily. It is a transmembrane molecule with 7 potential N-glycosylated sites, expressed on resting monocytes and endothelial cells and can be upregulated on many other cells, e.g. with lymphokines, on B- and T-lymphocytes, thymocytes, dendritic cells and also on keratinocytes, chondrocytes, as well as epithelial cells. CD54 mediates cell adhesion by binding to integrins CD11a/CD18 (LFA-1) and to CD11b/CD18 (Mac-1). The interaction of CD54 with LFA-1 enhances antigen-specific T-cell activation.

Product Info

Amount :	100 tests
Purification :	Purified antibody is conjugated with activated tandem dye of R-phycoerythrin-cyanine 7 (PE-Cy™ 7) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
Content :	Formulation: Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Storage condition :	Store at 2-8°C. Do not freeze.

Application Note

Flow Cytometry: The reagent is designed for analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

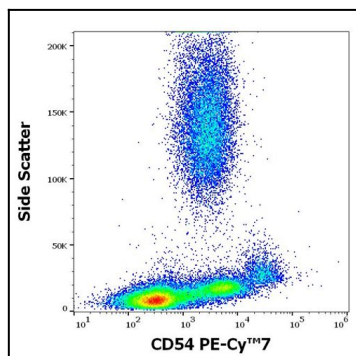


Figure 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD54 (1H4) PE-Cy™ 7 antibody (concentration in sample 0.33 µg/ml).

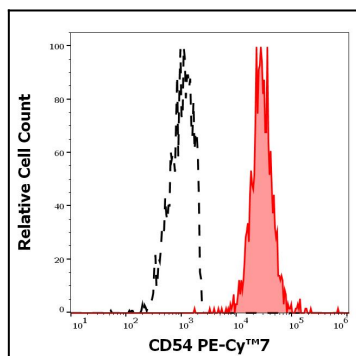


Figure 2: Separation of human monocytes (red-filled) from CD54 negative lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD54 (1H4) PE-Cy™ 7 antibody (concentration in sample 0.33 µg/ml).