

Pacific Blue™ anti-human CD54

Catalog # / Size: 322715 / 25 µg
322716 / 100 µg

Clone: HCD54

Isotype: Mouse IgG1, κ

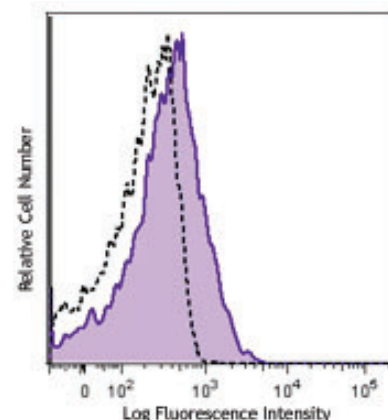
Reactivity: Human, **Cross-Reactivity:** Chimpanzee

Preparation: The antibody was purified by affinity chromatography, and conjugated with Pacific Blue™ under optimal conditions. The solution is free of unconjugated Pacific Blue™.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Human peripheral blood lymphocytes were stained with CD54 (clone HCD54) Pacific Blue™ (filled histogram) or mouse IgG1, κ Pacific Blue™ isotype control (open histogram).

Applications:

Applications: FC - Quality tested

Recommended Usage: This reagent is developed for immunofluorescent staining for flow cytometric analysis, the suggested use of this reagent is ≤ 2.0 µg per 10⁶ cells in 100 µl volume or 100 µl of whole blood. It is highly recommended that the reagent be titrated for optimal performance for each application.

* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

** Pacific Blue™ is a registered trademark of Molecular Probes, Inc. Pacific Blue™ dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

Application Notes: Additional reported applications (for the relevant formats) include: *in vitro* blocking¹ of lymphocytes interaction and immunohistochemistry of acetone-fixed frozen sections¹. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 322704).

Application References: 1. Personal communication.

Description: CD54 is a 85-110 kD type I transmembrane protein also known as ICAM-1. It is expressed on activated endothelial cells, high endothelial venules, T and B cells, monocytes/macrophages, granulocytes, and dendritic cells. The expression of ICAM-1 on the cell surface is potently upregulated by activation; a soluble form of ICAM-1 can be released from the cell surface. CD54 plays a role in cellular adhesion and is involved in inflammation and leukocyte extravasation. CD54 has also been shown to be the major cellular receptor for rhinovirus. ICAM-1 binds to CD11a/CD18 (LFA-1), CD11b/CD18 (Mac-1), CD11c/CD18 (p150, 95) as well as hyaluronan and fibrinogen.

Antigen References: 1. Voraberger G, *et al.*. 1991 *J. Immunol.* 147:2777.
2. Staunton DE, *et al.*. 1988. *Cell* 52:925.
3. Greve JM, *et al.*. 1989. *Cell* 56:839.

Related Products:

Product
Pacific Blue™ Mouse IgG1, κ Isotype Ctrl
Cell Staining Buffer
RBC Lysis Buffer (10X)
Human TruStain FcX™ (Fc Receptor Blocking Solution)

Clone
MOPC-21

Application
FC, ICFC
FC, ICC, ICFC
FC, ICFC
FC, ICC, ICFC



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