

Product Data Sheet

LEAF™ Purified anti-human CD54

Catalog # / Size: 322703 / 50 µg
322704 / 500 µg

Clone: HCD54

Isotype: Mouse IgG1, κ

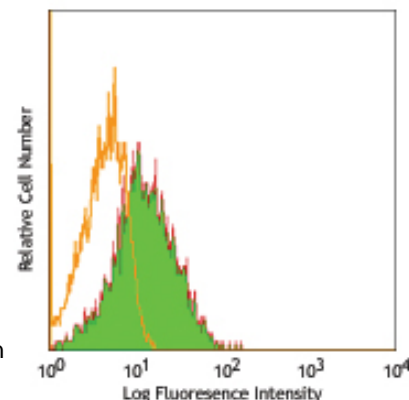
Reactivity: Human, **Cross-Reactivity:** Chimpanzee

Preparation: The LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.

Formulation: 0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <0.1 EU/µg of the protein (<0.01 ng/µg of the protein) as determined by the LAL test.

Concentration: 1.0 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C. This LEAF™ solution contains no preservative; handle under aseptic conditions.



Human peripheral blood lymphocytes stained with LEAF™ purified HCD54, followed by anti-mouse IgG FITC

Applications:

Applications: FC - *Quality tested*
Block, IHC - *Reported in the literature*

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤2.0 µg per million cells in 100 µl volume or 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

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**
LEAF™ Purified Mouse IgG1, κ Isotype Ctrl
Cell Staining Buffer

Clone
MOPC-21

Application
FC, ICFC, WB, IP, ICC, IF, FA
FC, ICC, ICFC



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