## **Product Data Sheet**

## FITC anti-human CD54

Catalog # / Size: 2213600 / 100 tests

Clone: HCD54

**Isotype:** Mouse IgG1, κ

Reactivity: Human

**Preparation:** The antibody was purified by affinity

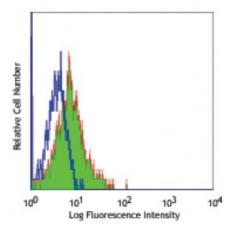
chromatography, and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.

**Formulation:** Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



Human peripheral blood lymphocytes stained with HCD54

## **Applications:**

**Applications:** Flow Cytometry

Recommended

Usage:

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 microL to 5 microL per test**. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL 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* blocking of lymphoctes interaction1. The LEAF $^{\text{TM}}$  purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 322704).

Application References:

1. Evans HG, et al. 2009. Proc. Natl. Acad. Sci. USA. 106:6232. (Block) PubMed

**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.

erences: 2. Staunton DE, et al.. 1988. Cell 52:925.

3. Greve IM, et al.. 1989. Cell 56:839.