

# Product Data Sheet

## PE anti-rat CD54

**Catalog # / Size:** 202405 / 100 µg

**Clone:** 1A29

**Isotype:** Mouse IgG1, κ

**Immunogen:** HEV-derived cell line Ax

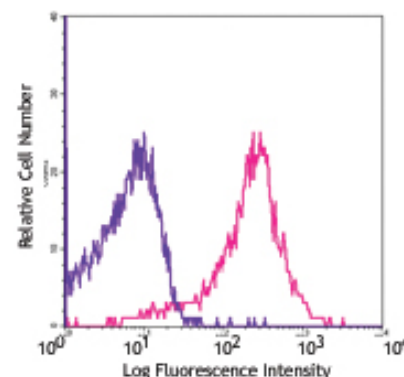
**Reactivity:** Rat

**Preparation:** The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.

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

**Concentration:** 0.2 mg/ml

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



LOU rat splenocytes stained with  
1A29 PE

## Applications:

**Applications:** FC - Quality tested

**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 ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunohistochemistry<sup>1,5</sup> of acetone-fixed frozen sections and STUF-treated paraffin-embedded sections, immunoprecipitation<sup>2</sup>, *in vitro* and *in vivo* blocking of PMA-induced T cell blast aggregation and adhesion to HEV-derived endothelial cells and purified ICAM-1 protein<sup>2,3,4</sup>.

**Application References:**

1. Clark WM, *et al.* 1995. *Mol. Chem. Neuropathol.* 26:213. (IHC)
2. Tamatani T, *et al.* 1990. *Int. Immunol.* 2:165. (IP)
3. Tamatani T, *et al.* 1991. *Eur. J. Immunol.* 21:627.
4. Willenborg DO, *et al.* 1996. *J. Immunol.* 157:1973.
5. McKechnie NM, *et al.* 2002. *IVOS* 43:411. (IHC)

**Description:** CD54 is an 85 kD protein also known as ICAM-1. It is a member of the immunoglobulin superfamily that is expressed on high endothelial venules in lymphoid tissue, peripheral blood monocytes, dendritic cells, granulocytes and thymic stromal cells. CD54 is weakly expressed on T and B cells, although expression can be increased by activation (especially on endothelial cells). ICAM-1 is an important protein in cell adhesion, inflammation and immune responses. CD54 has been shown to bind to CD11a/CD18 (LFA-1), CD11b/CD18, CD11c/CD18, CD43, fibrinogen, and hyaluronan. The 1A29 antibody has been reported to block T cell aggregation and binding of lymphocytes to HEV-derived endothelial cells and purified ICAM-1 protein.

**Antigen References:**

1. Tamatani T, *et al.* 1990. *Int. Immunol.* 2:165.
2. Tamatani T, *et al.* 1991. *Eur. J. Immunol.* 21:627.
3. Turunen JP, *et al.* 1993. *Scand. J. Immunol.* 37:282.

**Related Products:**

<b>Product</b>	<b>Clone</b>	<b>Application</b>
PE Mouse IgG1, κ Isotype Ctrl (FC)	MOPC-21	FC
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC



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