

Biotin anti-rat CD54

Catalog # / Size: 202403 / 100 µg

Clone: 1A29

Isotype: Mouse IgG1, κ

Immunogen: HEV-derived cell line Ax

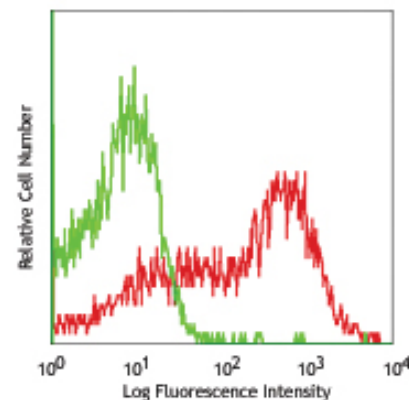
Reactivity: Rat

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

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. **Do not freeze.**



LOU rat splenocytes stained with biotinylated 1A29, followed by SAV-PE

Applications:

Applications: FC - *Quality tested*
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 ≤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^{1,5} of acetone-fixed frozen sections and STUF-treated paraffin-embedded sections, immunoprecipitation², *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^{2,3,4}.

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:

Product
Biotin Mouse IgG1, κ Isotype Ctrl
APC Streptavidin
HRP Streptavidin
PE Streptavidin
PE/Cy5 Streptavidin
Cell Staining Buffer

Clone
MOPC-21

Application
FC, ICFC
FC, ICFC
ELISA, ELISPOT, IHC, WB
FC, ICFC
FC, ICFC
FC, ICC, ICFC



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