Antibodies

Anti-Mouse CD54 (ICAM-1) Antibody, Clone YN1/1.7.4

Rat monoclonal IgG2b antibody against mouse CD54, unconjugated

Catalog #60151	500 µg	0.5 mg/mL
#60151.1	50 µg	0.5 mg/mL

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Product Description

The YN1/1.7.4 antibody reacts with CD54, a 90 - 110 kDa type I transmembrane glycoprotein that is a member of the immunoglobulin (Ig) superfamily. CD54 consists of five Ig-like C2 type domains and has two isoforms generated from alternative splicing. As an important intercellular adhesion molecule, CD54 is involved in inflammatory reactions, antigen-specific immune responses, lymphocyte trafficking, and T cell signal transduction events. CD54 mediates important cell-cell interactions and adhesion reactions by binding to its major ligands, LFA-1 (CD11a/CD18) and Mac-1 (CD11b/CD18). CD54 may also act as a receptor for rhinoviruses and some coxsackieviruses. CD54 is expressed on lymphocytes, monocytes, macrophages, dendritic cells, endothelial cells, and high endothelial venules. Expression of CD54 is upregulated on activated lymphocytes and also, following stimulation with inflammatory mediators such as cytokines, LPS, and IFN-γ. The YN1/1.7.4 antibody has been used to inhibit CD54-mediated functions (i.e. cell-cell adhesion, antigen presentation to T cells, and leukocyte migration) and to block the binding of CD54 to LFA-1 and Mac-1. The YN1/1.7.4 antibody recognizes a distinct epitope from that of KAT-1.

Target Antigen Name:	CD54
Alternative Names:	BB2, Cell surface glycoprotein P3.58, Human rhinovirus receptor, Intercellular adhesion molecule 1, Ly-47, MALA2, MyD10
Gene ID:	15894
Species Reactivity:	Mouse
Host Species:	Rat (Fisher 344)
Clonality:	Monoclonal
Clone:	YN1/1.7.4
Isotype:	IgG2b, kappa
Immunogen:	Mouse NS-1 myeloma cell line
Conjugate:	Unconjugated

Applications

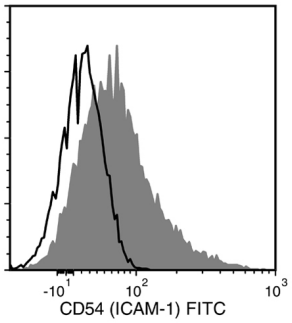
Verified:	FC
Reported:	Blocking, ELISA, FC, IHC, IF, Inhibition, IP, Purification, RIA, WB

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Purification:	The antibody was purified by affinity chromatography.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact techsupport@stemcell.com.
Directions for Use:	The suggested use of this antibody is: FC, ≤ 0.25 µg per 1 x 10^6 cells in 100 µL; WB, ≤ 4 µg/mL. It is recommended that the antibody be titrated for optimal performance for each application.

Data



Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD54 (ICAM-1) Antibody, Clone YN/1.7.4, followed by a mouse anti-rat IgG2b antibody, FITC (filled histogram) or Rat IgG2b, kappa Isotype Control Antibody, Clone RTK4530 (Catalog #60077), followed by a mouse anti-rat IgG2b antibody, FITC (solid line histogram).

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

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