

A22313

Leader in Biomolecular Solutions for Life Science



ABflo® 647 Rabbit anti-Human ICAM-1/CD54 mAb

Catalog No.: A22313

Basic Information

Observed MW

Calculated MW
58kDa

Category

SMab Recombinant Monoclonal Antibody

Applications

FC

Cross-Reactivity

Human

CloneNo number

ARC54998-ABf647

Conjugate

ABflo® 647. Ex:648nm. Em:664nm.

Background

Intercellular cell adhesion molecule-1 (CD54 or ICAM-1) is a cell surface glycoprotein that belongs to the immunoglobulin superfamily (IgSF) of adhesion molecules. CD54 is expressed at low levels in diverse cell types, and is induced by cytokines (TNF- α , interleukin-1) and bacterial lipopolysaccharide. Apical localization of CD54 on endothelial cells (or basolateral localization on epithelial cells) is a prerequisite for leukocyte trafficking through the endothelial (or epithelial) barrier. Apical expression of CD54 on epithelial cells mediates pathogen invasion as well as host defense, a pattern also observed in tumors. CD54 also functions as a co-stimulator on antigen presenting cells, binding to its receptor LFA-1 (leukocyte function-associated antigen-1) on the surface of T cells during antigen presentation. Cross-linking of CD54 or binding to its ligand triggers activation of Src family kinases and the Rho/ROCK pathway. Phosphorylation on Tyr485 of CD54 is required for its association with SHP-2. SHP-2 seems essential for CD54-induced Src activation.

Recommended Dilutions

FC 5 μ l per 10^6 cells in
100 μ l volume

Immunogen Information

Gene ID
3383

Swiss Prot
P05362

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 28-480 of human ICAM-1/CD54 (NP_000192.2).

Synonyms

BB2; CD54; P3.58

Contact



www.abclonal.com

Product Information

Source
Rabbit

Isotype
IgG

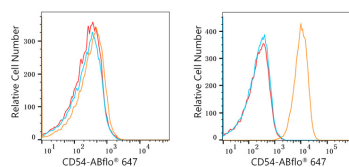
Purification
Affinity purification

Storage

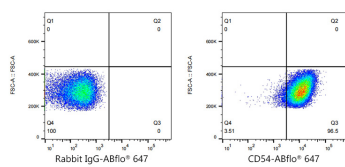
Store at 2-8°C. Avoid freeze.

Buffer: PBS with 0.03% proclin300, 0.2% BSA, pH7.3.

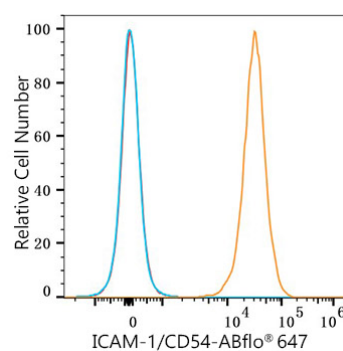
Validation Data



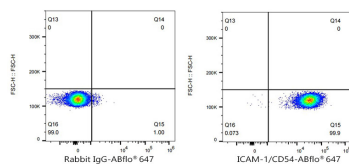
Flow cytometry: 1×10^6 293F cells (negative control, left) and Raji cells (right) were surface-stained with ABflo® 647 Rabbit anti-Human ICAM-1/CD54 mAb (A22313, 2 $\mu\text{g}/\text{mL}$, orange line) or ABflo® 647 Rabbit IgG isotype control (A22070, 2 $\mu\text{g}/\text{mL}$, blue line). Non-fluorescently stained cells were used as blank control (red line).



Flow cytometry: 1×10^6 Raji cells were surface-stained with ABflo® 647 Rabbit IgG isotype control (A22070, 5 $\mu\text{l}/\text{Test}$, left) or ABflo® 647 Rabbit anti-Human ICAM-1/CD54 mAb (A22313, 5 $\mu\text{l}/\text{Test}$, right).



Flow cytometry: 1×10^6 Human PBMC were surface-stained with ABflo® 647 Rabbit anti-Human ICAM-1/CD54 mAb (A22313, 5 $\mu\text{l}/\text{Test}$, orange line) or ABflo® 647 Rabbit IgG isotype control (A22070, 5 $\mu\text{l}/\text{Test}$, blue line). Non-fluorescently stained cells were used as blank control (red line).



Flow cytometry: 1×10^6 Human PBMC were surface-stained with ABflo® 647 Rabbit IgG isotype control (A22070, 5 $\mu\text{l}/\text{Test}$, left) or ABflo® 647 Rabbit anti-Human ICAM-1/CD54 mAb (A22313, 5 $\mu\text{l}/\text{Test}$, right).