

## PRODUCT DATA SHEET

Bioworld Technology,Inc.

# **CD54** monoclonal antibody

Catalog: MB66656 Host: Mouse Reactivity: Human

#### **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.

#### **Product:**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.

#### **Molecular Weight:**

~ 95 kDa

#### **Swiss-Prot:**

P05362

#### **Purification&Purity:**

The antibody was purified by immunogen affinity chromatography.

#### **Applications:**

WB (1/500 - 1/1000), IF/ICC (1/50 - 1/100)

#### Storage&Stability:

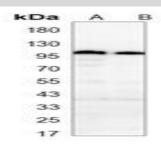
Store at 4 ℃ short term. Aliquot and store at -20 ℃ long

term. Avoid freeze-thaw cycles.

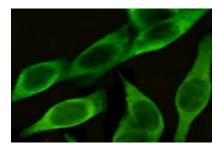
## **Specificity:**

Recognizes endogenous levels of CD54 protein.

#### **DATA:**



Western blot analysis of CD54 expression in SW480 (A), Raji (B) whole cell lysates.



Immunofluorescent analysis of CD54 staining in SW480 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark.

#### Note:

For research use only, not for use in diagnostic procedure.

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