



## Monoclonal Antibody to **Anti-Human CD54 (ICAM-1)**

### *Technical Data Sheet*

#### Reagent Category

Monoclonal primary antibody to  
CD 54 (ICAM-1)

#### Antibody Formats Supplied

- 5 ml of anti CD54, Ready-To-Use
- 0.2 ml of anti CD54, Concentrate

PRODUCT# IMI16561E (Ready-To-Use)

PRODUCT# IMI16552E (Concentrate)

**SOURCE:** Mouse Ascites

**IMMUNOGEN:** RAJI cells

**IMMUNOGLOBULIN ISOTYPE:** IgG1

**CLONE:** 15.02

**POSITIVE CONTROL TISSUE:** Tonsil

#### **REACTIVITY**

ICAM-1, human intercellular adhesion molecule-1 belongs to the immunoglobulin superfamily. CD54 is a transmembrane molecule of 90 kD that is expressed on endothelial cells and on resting monocytes. CD54 is involved in mediating cell adhesion of monocytes, lymphocytes and neutrophils by binding to integrins CD11a/CD18 (LFA-1) and to CD11b/CD18 (MAC-1). This antibody is suitable for use on routinely fixed paraffin embedded or frozen sections or cell smears.

**STAINING PATTERN:** Membrane staining

#### **Antibody FORMAT, DILUTION and INCUBATION**

Monoclonal mouse anti CD54 (ICAM-1) antibody is provided in phosphate buffered saline pH 7.2 containing bovine serum albumin (BSA) and 0.05% sodium azide. This antibody is available in:

**5 ml of pre-diluted, Ready-To-Use, Do not dilute. Incubate for 30-minutes.**

**This antibody best stains when formalin fixed paraffin embedded tissue sections are retrieved. This antibody best stains when formalin fixed paraffin embedded tissue sections are retrieved.**

*For Background-Free retrieval, Innovex Uni-Trieve (60°C -70°C) universal retrieval solution is highly recommended. To retrieve with Uni-Trieve: Warm up a water bath or an oven to 60°C -70°C and fill a slide-holding container with Uni-Trieve solution. Place slides in a slide rack or in a coplin jar, fill the container with Uni-Trieve solution, bring the Uni-Trieve solution containing the slides to 60°C - 70°C and hold slides in warm Uni-Trieve solution for 30 minutes. Rinse slides with 2 quick changes of water. No cooling period is required. Proceed with immunostaining.*

**CONTINUED OVER**



□ **0.2 ml of concentrate:** The suggested starting dilution for 30-minute incubation is 1:50 for paraffin sections and 1:100 for frozen sections. The ultimate working dilution and incubation time must be determined by the end user for the incubation time, specimen and the secondary reagents employed. This antibody best stains when formalin fixed paraffin embedded tissue sections are retrieved. This antibody best stains when formalin fixed paraffin embedded tissue sections are retrieved.

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*The above dilutions and incubation times were derived by the use of Innovex STAT-Q and HISTO-STAT staining systems. For less sensitive detection systems these dilution factors may vary and they should be determined by the end user for specific detection system employed*

### **SPECIAL USAGE GUIDANCE**

No pre-treatment is necessary with this antibody, however, the use of enhancing wash buffers (Item#: IMI00396E for Immuno-Peroxidase staining and Item#: IMI00596E for Immuno-Alkaline-phosphatase) is highly recommended. The use of signal-Enhancing wash buffers produce great staining even for weak or overfixed tissues in a single try and without repetitive procedures. They also further allow the user to cut primary incubation time and/or increase antibody dilution.

### **APPLICATIONS**

This antibody is intended for use in immunolocalization of CD54 antigen in human tissue by a variety of immunoassays such as Immunochemistry, ELISA, Immunoblotting, dot blotting and for use in functional assays in adhesion research. In immunochemistry, this antibody can be used in staining routinely fixed paraffin embedded or frozen histological sections for the purpose of qualitative localization of CD54 antigen. This antibody can also be used for quantitative flow cytometric assays in the indirect method.

### **SPECIES REACTIVITY**

This antibody reactivity with human has been substantiated, other species reactivity may be characterized by the end user.

### **STORAGE CONDITIONS**

Store in refrigerator at 2-8°C through expiration date noted on the vial.

### **IMPORTANT NOTE:**

**The interpretation of test results is the sole responsibility of the end user.**

**FOR IN VITRO RESEARCH USE ONLY**