Technical Data Sheet

Biotin Mouse Anti-Rat CD54

Product Information

Material Number: 554968
Alternate Name: ICAM-1
Size: 0.5 mg
Concentration: 0.5 mg/ml
Clone: 1A29
Immunogen: Rat HEV-Derived Cell Line Ax
Isotype: Mouse (BALB/c) IgG1, κ
Reactivity: QC Testing: Rat
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 1A29 antibody reacts with ICAM-1 (CD54), an 85 kDa surface glycoprotein expressed on vascular endothelium in lymphoid tissues, thymic stromal cells, peripheral blood monocytes, peritoneal macrophages and mast cells, dendritic cells, and weakly on peripheral lymphocytes and thymocytes. ICAM-1 is a ligand for LFA-1 (CD11a/CD18) and Mac-1 (CD11b/CD18). Its expression is upregulated on activated lymphocytes and endothelial cells. 1A29 mAb inhibits PMA-induced aggregation of PHA-stimulated splenic blasts, as well as the adhesion of mitogen-stimulated blasts to HEV-derived endothelial cells and purified ICAM-1. It has also been reported that 1A29 antibody can inhibit leukocyte infiltration in in vivo systems, blocks induction of experimental allergic encephalomyelitis, and reduces NK-cell adhesion to tumor cells. The effects of in vivo administration of the 1A29 monoclonal antibody have been thoroughly investigated.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with biotin under optimum conditions, and unreacted biotin was removed.
Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

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<thead>
<tr>
<th>Application</th>
<th>Routinely Tested</th>
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<tr>
<td>Flow cytometry</td>
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Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<tbody>
<tr>
<td>550615</td>
<td>Biotin Mouse IgG1 κ Isotype Control</td>
<td>0.25 mg</td>
<td>MOPC-31C</td>
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<tr>
<td>554061</td>
<td>PE Streptavidin</td>
<td>0.5 mg</td>
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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References


BD Biosciences

www.bdbiosciences.com

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Tamutani T, Miyasaka M. Identification of monoclonal antibodies reactive with the rat homolog of ICAM-1, and evidence for a differential involvement of ICAM-1 in the adherence of resting versus activated lymphocytes to high endothelial cells. *Int Immunol.* 1990; 2(2):165-171. (Immunogen: Inhibition)


