Product Information

Material Number: 555647
Alternate Name: VCAM-1; Vascular cell adhesion protein 1; INCAM-100; L1CAM
Size: 100 Tests
Vol. per Test: 20 µl
Clone: 51-10C9
Immunogen: Human VCAM-1 Recombinant Protein
Isotype: Mouse IgG1, κ
Reactivity: QC Testing: Human
Workshop: VE112
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The 51-10C9 monoclonal antibody specifically binds to CD106. CD106 is a 100-110 kDa type I transmembrane sialoglycoprotein that is also known as Vascular cell adhesion molecule-1 (VCAM-1) and INCAM-110. CD106 is expressed at high levels on the surface of cytokine-stimulated endothelium, and at minimal levels on unstimulated endothelium. VCAM-1 serves as a ligand for the leukocyte integrins α4β1 (CD49d/CD29 complex; VLA-4) and α4β7 (LPAM-1). The 51-10C9 monoclonal antibody inhibits the in vitro binding of lymphocytes and monocytes to VCAM-1 on stimulated endothelium.

Flow cytometric analysis of CD106 on TNF-α-activated HUVEC cell line. HUVEC cells were stimulated with Recombinant Human TNF Protein (Cat. No. 554618; 20 ng/ml), then stained with either PE Mouse IgG1, κ Isotype Control (Cat. No. 555749; dashed line histogram) or PE Mouse Anti-Human CD106 (Cat. No. 555647/561679; solid line histogram). Fluorescent histograms were derived from gated events based on the light scattering characteristics for viable HUVEC cells. Flow cytometry was performed on a BD FACScan™.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Application Notes

Application

| Flow cytometry | Routinely Tested |

Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>555749</td>
<td>PE Mouse IgG1, κ Isotype Control</td>
<td>100 Tests</td>
<td>MOPC-21</td>
</tr>
<tr>
<td>561679</td>
<td>PE Mouse Anti-Human CD106</td>
<td>25 Tests</td>
<td>51-10C9</td>
</tr>
<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
<td>500 mL</td>
<td>(none)</td>
</tr>
<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</td>
<td>500 mL</td>
<td>(none)</td>
</tr>
<tr>
<td>554618</td>
<td>Recombinant Human TNF</td>
<td>10 µg</td>
<td>(none)</td>
</tr>
</tbody>
</table>
Product Notices
1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use $1 \times 10^6$ cells in a 100-µl experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. 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.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

References