Human CD31/PECAM-1 Antibody
Monoclonal Mouse IgG1, Clone # 9G11
Catalog Number: BBA7

**DESCRIPTION**

**Species Reactivity**
Human

**Specificity**
Detects human CD31/PECAM-1. In Western blots, no cross-reactivity with recombinant human (rh) E-Selectin, rhICAM-1,-2, -3, rhVCAM-1, or recombinant mouse VCAM-1 was observed.

**Source**
Monoclonal Mouse IgG1, Clone # 9G11

**Purification**
Activated HUVEC human umbilical vein endothelial cells

**Immunogen**
Activated HUVEC human umbilical vein endothelial cells

**Formulation**
Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

**APPLICATIONS**

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Recommended Concentration</th>
<th>Western Blot</th>
<th>Immunocytochemistry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Blot</td>
<td>1 μg/mL</td>
<td></td>
<td>See Below</td>
</tr>
<tr>
<td>Immunocytochemistry</td>
<td>8-25 μg/mL</td>
<td></td>
<td>See Below</td>
</tr>
</tbody>
</table>

**DATA**

**Western Blot**
Detection of Human CD31/PECAM-1 by Western Blot. Western blot shows lysates of HUVEC human umbilical vein endothelial cells. PVDF membrane was probed with 1 μg/mL of Mouse Anti-Human CD31/PECAM-1 Monoclonal Antibody (Catalog # BBA7) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for CD31/PECAM-1 at approximately 130 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**Immunocytochemistry**
CD31/PECAM-1 in HUVEC Human Cells. CD31/PECAM-1 was detected in immersion fixed HUVEC human umbilical vein endothelial cells using 10 μg/mL Mouse Anti-Human CD31/PECAM-1 Monoclonal Antibody (Catalog # BBA7) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # HAF018) and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

**PREPARATION AND STORAGE**

**Reconstitution**
Sterile PBS to a final concentration of 0.5 mg/mL.

**Shipping**
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage**
Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

**BACKGROUND**

The CD31 adhesion molecule, also known as PECAM-1, is expressed in large amounts on endothelial cells at intercellular junctions and on T cell subsets, and to a lesser extent on platelets and most other leukocytes such as monocytes and neutrophils. CD31 binds to itself homotypically, and also to the leukocyte integrin αvβ3 heterotypically. CD31 is required for the transendothelial migration of leukocytes through intercellular junctions of vascular endothelial cells. CD31 has been found in human plasma, and the presence of this circulating isoform is suggested to modulate the transendothelial migration of leukocytes.