### Overview

<table>
<thead>
<tr>
<th><strong>Quantity:</strong></th>
<th>100 μg</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target:</strong></td>
<td>CD31 (PECAM1)</td>
</tr>
<tr>
<td><strong>Binding Specificity:</strong></td>
<td>AA 625-738</td>
</tr>
<tr>
<td><strong>Reactivity:</strong></td>
<td>Human</td>
</tr>
<tr>
<td><strong>Host:</strong></td>
<td>Mouse</td>
</tr>
<tr>
<td><strong>Clonality:</strong></td>
<td>Monoclonal</td>
</tr>
<tr>
<td><strong>Conjugate:</strong></td>
<td>This CD31 antibody is un-conjugated</td>
</tr>
<tr>
<td><strong>Application:</strong></td>
<td>Flow Cytometry (FACS), Immunofluorescence (IF), Immunohistochemistry (IHC), Staining Methods (StM)</td>
</tr>
</tbody>
</table>

### Product Details

<table>
<thead>
<tr>
<th><strong>Immunogen:</strong></th>
<th>Recombinant fragment (around aa 625-738) of human CD31 protein (exact sequence is proprietary)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clone:</strong></td>
<td>PECAM1-3527</td>
</tr>
<tr>
<td><strong>Isotype:</strong></td>
<td>IgG</td>
</tr>
<tr>
<td><strong>Specificity:</strong></td>
<td>CD31 (PECAM-1) is a transmembrane glycoprotein member of the immunoglobulin supergene family of adhesion molecules. CD31 is expressed by stem cells of the hematopoietic system and is primarily used to identify and concentrate these cells for experimental studies as well as for bone marrow transplantation. Anti-CD31 has shown to be highly specific and sensitive for vascular endothelial cells. Staining of nonvascular tumors (excluding hematopoietic neoplasms) is rare. CD31 MAb reacts with normal, benign, and malignant endothelial cells</td>
</tr>
</tbody>
</table>
Product Details

which make up blood vessel lining. The level of CD31 expression can help to determine the
degree of tumor angiogenesis, and a high level of CD31 expression may imply a rapidly growing
tumor and potentially a predictor of tumor recurrence.

Purification:
Purified by Protein A/G

Target Details

Target:
CD31 (PECAM1)

Alternative Name:
PECAM1 (PECAM1 Products)

Molecular Weight:
~100kDa (endothelium) and ~130kDa (platelets)

Gene ID:
5175

UniProt:
P16284

Pathways:
Regulation of Actin Filament Polymerization

Application Details

Application Notes:
Positive Control: Jurkat cells. Tonsil or Angiosarcoma.
Known Application: Flow Cytometry (1-2 μg/million cells), Immunofluorescence (1-2 μg/mL), Immunohistochemistry (Formalin-fixed) (1-2 μg/mL for 30 minutes at RT), (Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes), Optimal dilution for a specific application should be determined.

Restrictions:
For Research Use only

Handling

Concentration:
200 μg/mL

Buffer:
10 mM PBS with 0.05 % BSA & 0.05 % azide.

Preservative:
Sodium azide

Precaution of Use:
This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage:
4 °C - 80 °C

Storage Comment:
Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody
Handling

is stable for 24 months. Non-hazardous. No MSDS required.

Expiry Date: 24 months

Images

Western Blotting

Image 1. Western Blot Analysis of THP-1 cell lysate using CD31 Mouse Monoclonal Antibody (PECAM1/3527).

Protein Array

Image 2. Analysis of Protein Array containing more than 19,000 full-length human proteins using CD31 Mouse Monoclonal Antibody (PECAM1/3527) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SDs) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SDs) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.
Flow Cytometry

Image 3. Flow Cytometric Analysis of Jurkat cells using CD31 Mouse Monoclonal Antibody (PECAM1/3527) followed by goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

Please check the product details page for more images. Overall 9 images are available for ABIN6940277.