CD31 Monoclonal ANTIBODY

Catalog Number: 66065-1-Ig

Basic Information

Catalog Number: 66065-1-Ig
Size: 137 μg/150 μl
Source: Mouse
Isotype: IgG2b
Purification Method: Protein A purification
Immunogen Catalog Number: AG1787
GenBank Accession Number: BC022512
GeneID (NCBI): 5175
Full Name: platelet/endothelial cell adhesion molecule
Calculated MW: 83 kDa
Observed MW: 120-130 kDa
Recommended Dilutions:
- WB: 1:2000-1:8000
- IHC: 1:400-1:4000
- IF: 1:50-1:500

Applications

Tested Applications:
- IF, IHC, WB, ELISA
Cited Applications:
- IF, WB
Species Specificity:
- human
Cited Species:
- human

Positive Controls:
- WB: Jurkat cells, THP-1 cells, human placenta tissue
- IHC: human liver cancer tissue; human breast cancer tissue, human tonsillitis tissue
- IF: human tonsillitis tissue

Note: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

Platelet endothelial cell adhesion molecule-1 (PECAM1, CD31) is a member of the immunoglobulin gene superfamily of cell adhesion molecules. CD31 is a transmembrane glycoprotein with a molecular mass of approximately 120-140 kDa. It is highly expressed on the surface of the endothelium, making up a large portion of its intracellular junctions. PECAM1 is also present on the surface of hematopoietic cells and immune cells including platelets, monocytes, neutrophils, natural killer cells, megakaryocytes and some types of T-cell (PMID: 9011572). As well as its role in cell-cell adhesion, PECAM1 functions as a signaling receptor, and is involved in important physiological events such as nitric oxide production, regulation of T-cell immunity and tolerance, leukocyte transendothelial migration and inflammation and angiogenesis (PMID: 21183735; 20978210; 17872453; 20634489).

Notable Publications

<table>
<thead>
<tr>
<th>Author</th>
<th>PubMed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alina Jankowska-Konsur</td>
<td>27630298</td>
<td>Anticancer Res</td>
<td></td>
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<tr>
<td>Jing-Guo Chen</td>
<td>27963958</td>
<td>Life Sci</td>
<td></td>
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<tr>
<td>Youguo Dai</td>
<td>27276330</td>
<td>Oncol Rep</td>
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Storage

Storage:
- Store at -20°C. Stable for one year after shipment.
- Storage Buffer:
  - PBS with 0.05% sodium azide and 50% glycerol pH 7.3
  - Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or (312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.
Untreated and PNGase F-treated lysates of Jurkat cells were subjected to SDS-PAGE followed by western blot with 66065-1-Ig (CD31 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours. PNGase F was obtained from Atagenix (cat. NO. at808).

Various lysates were subjected to SDS-PAGE followed by western blot with 66065-1-Ig (CD31 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.

Immunohistochemistry of paraffin-embedded human liver cancer tissue slide using 66065-1-Ig (CD31 antibody) at dilution of 1:4000 (under 10x lens) heat mediated antigen retrieved with Tris-EDTA buffer (pH 9).

Immunohistochemistry of paraffin-embedded human liver cancer tissue slide using 66065-1-Ig (CD31 antibody) at dilution of 1:4000 (under 40x lens) heat mediated antigen retrieved with Tris-EDTA buffer (pH 9).

Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using 66065-1-Ig (CD31 antibody) at dilution of 1:200 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG (H+L).

Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using 66065-1-Ig (CD31 antibody) at dilution of 1:200 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG (H+L).