PE Hamster Anti-Mouse Podoplanin

Product Information

Material Number: 566390
Alternate Name: Podpnl; Aggrus; Glycoprotein 38; Gp38; OTS-8; RANDAM-2; T1A; T1alpha; PA2.26
Size: 0.1 mg
Concentration: 0.2 mg/ml
Clone: 8.1.1
Immunogen: Mouse Thymic Stromal 186 Cell Line
Isotype: Hamster IgG2
Reactivity: QC Testing: Mouse
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 8.1.1 monoclonal antibody specifically recognizes Podoplanin which is encoded by \textit{Pdpn}. Podoplanin is a ~43 kDa type I transmembrane glycoprotein that is also known as Glycoprotein 38 (Gp38), OTS-8 (Ots8), Aggrus, RANDAM-2, or T1alpha (T1A). This heavily glycosylated mucin type protein is named for its expression on kidney glomerular epithelial cells known as podocytes. It is also expressed on epithelial and mesothelial cells including intestinal and thymic epithelial cells, alveolar type I cells, fibroblastic reticular cells, lymphatic endothelial cells, macrophages and osteoblasts. Podoplanin plays an essential role in the development of the heart, lymphatic system, and lungs. Podoplanin is involved in actin cytoskeleton organization, and cellular adhesion and migration. It may also play roles in platelet aggregation, promoting inflammatory diseases, tumorigenesis and cancer cell motility and metastasis.

Flow cytometric analysis of Podoplanin expressed on mouse C2C12 cells. Cells from the mouse C2C12 (Myoblast, ATCC CRL-1772) cell line were harvested with trypsin-EDTA dissociation solution. The cells were then washed and stained with either PE Hamster IgG2, κ Isotype Control (Cat. No. 550085; dashed line histogram) or PE Hamster Anti-Mouse Podoplanin antibody (Cat. No. 566390; solid line histogram) at 0.25 μg/ml. The histogram showing Podoplanin expression (or Ig Isotype control staining) was derived from gated events with the forward and side light-scatter characteristics of viable C2C12 cells. Flow cytometric analysis was performed using a BD™ Canto II Flow Cytometer System. Data shown on this Technical Data Sheet are not lot specific.

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

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<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<tbody>
<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
<td>500 mL</td>
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<tr>
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<td>Stain Buffer (BSA)</td>
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<tr>
<td>550085</td>
<td>PE Hamster IgG2, κ Isotype Control</td>
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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
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.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
5. Although hamster immunoglobulin isotypes have not been well defined, BD Biosciences Pharmingen has grouped Armenian and Syrian hamster IgG monoclonal antibodies according to their reactivity with a panel of mouse anti-hamster IgG mAbs. A table of the hamster IgG groups, Reactivity of Mouse Anti-Hamster Ig mAbs, may be viewed at http://www.bdbiosciences.com/documents/hamster_chart_11x17.pdf.

References