Technical Data Sheet

PE Rat Anti-Mouse CD162

Product Information

Material Number: 555306
Alternate Name: PSGL-1
Size: 0.2 mg
Concentration: 0.2 mg/ml
Clone: 2PH1
Immunogen: Ovalbumin-conjugated peptide covering amino acids 42 to 60 of mouse PSGL-1
Isotype: Rat (LEW) IgG1, κ
Reactivity: QC Testing: Mouse
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 2PH1 antibody reacts with the N-terminus of CD162 (P-selectin glycoprotein ligand-1, PSGL-1), encoded by the Selpl gene. PSGL-1 is expressed on the cell surface as a homodimer of approximately 230 kDa. In the mouse, Selpl mRNA is detected in most tissues, with high levels found in hematopoietic cells, brain, and adipose tissue. Flow cytometric analyses have revealed CD162 expression on bone marrow-derived mast and dendritic cells, splenic leukocytes, platelets, peripheral blood neutrophils, and neutrophil and T-cell lines. PSGL-1 is a ligand for P-selectin (CD62P) and is involved in leukocyte rolling, the migration of leukocytes into inflamed tissues, and responses to vascular injury. It is a sialomucin that must be specifically sialylated, fucosylated, and sulfated to bind P-selectin. There is also evidence that other ligands for PSGL-1 and CD62P may exist. 2PH1 mAb is reported to block binding of mouse leukocytes to CD62P, but 4RA10 mAb (Cat. No. 557787) has significantly greater blocking activity.

Preparation and Storage

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

Application Notes

<table>
<thead>
<tr>
<th>Application</th>
<th>Routinely Tested</th>
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<tbody>
<tr>
<td>Flow cytometry</td>
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Preferential expression of CD162 on splenic T lymphocytes. BALB/c splenocytes were simultaneously stained with PE-conjugated 2PH1 antibody (right panel) and FITC-conjugated anti-mouse CD3e mAb 145-2C11 (Cat. No. 553061/553062). Flow cytometry was performed on a BD FACScan™ flow cytometry system.
### Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<tbody>
<tr>
<td>553061</td>
<td>FITC Hamster Anti-Mouse CD3e</td>
<td>0.1 mg</td>
<td>145-2C11</td>
</tr>
<tr>
<td>557787</td>
<td>Purified NA/LE Rat Anti-Mouse CD162</td>
<td>0.5 mg</td>
<td>4RA10</td>
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<tr>
<td>553925</td>
<td>PE Rat IgG1, κ Isotype Control</td>
<td>0.1 mg</td>
<td>R3-34</td>
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### Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/pharmingen/colors.
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.

### References