**Technical Data Sheet**

**PE Rat Anti-Mouse CD90.2**

**Product Information**

- Material Number: 553006
- Alternate Name: Thy-1.2; T25; Thymus cell antigen 1, theta
- Size: 0.2 mg
- Concentration: 0.2 mg/ml
- Clone: 53-2.1
- Immunogen: Mouse Thymus / Spleen
- Isotype: Rat (LOU) IgG2a, κ
- Reactivity: QC Testing: Mouse
- Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

**Description**

The 53-2.1 monoclonal antibody specifically binds to the CD90.2 (Thy-1.2) alloantigen on thymocytes, most peripheral T lymphocytes, some intraepithelial T lymphocytes (IEL, DEC), epithelial cells, fibroblasts, neurons, hematopoietic stem cells, but not B lymphocytes, of most mouse strains. The 53-2.1 antibody has been reported not to crossreact with Thy-1.1 (e.g., AKR/J, PL), or with rat Thy-1. CD90 is a glycoposphatidylinositol-anchored membrane glycoprotein of the Ig superfamily that is involved in signal transduction. In addition, there is evidence that CD90 mediates adhesion of thymocytes to thymic stroma. The 53-2.1 antibody has been reported to block the binding of the Rat Anti-Mouse CD90.2 antibody (Clone 30-H12) to immobilized thymocyte membranes.

**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**

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>553930</td>
<td>PE Rat IgG2a, κ Isotype Control</td>
<td>0.1 mg</td>
<td>R35-95</td>
</tr>
<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
<td>500 mL</td>
<td>(none)</td>
</tr>
<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</td>
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<tr>
<td>553005</td>
<td>PE Rat Anti-Mouse CD90.2</td>
<td>0.1 mg</td>
<td>53-2.1</td>
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</tbody>
</table>

**Flow cytometric analysis of CD90.2 expression on mouse thymocytes.** Thymocytes from an AKR (Left Plot) or BALB/c (Right Plot) mouse were stained with either PE Rat IgG2a, κ Isotype Control (Cat. No. 553930; dashed line histogram s) or PE Rat Anti-Mouse CD90.2 antibody (Cat. No. 553005/553006; solid line histograms). The fluorescence histograms showing CD90.2 expression for Ig Isotype control staining were derived from gated events with the forward and side light-scatter characteristics of viable thymocytes. Flow cytometric analysis was performed using a BD FACSCanto™ System.

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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**

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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.

References