Technical Data Sheet
FITC Rat Anti-Mouse CD3 Molecular Complex

**Product Information**
- **Material Number:** 555274
- **Size:** 0.5 mg
- **Concentration:** 0.5 mg/ml
- **Clone:** 17A2
- **Immunogen:** γδ TCR-positive T-T hybridoma D1
- **Isotype:** Rat (SD) IgG2b, κ
- **Reactivity:** QC Testing: Mouse
- **Storage Buffer:** Aqueous buffered solution containing ≤0.09% sodium azide.

**Description**
The 17A2 antibody reacts with the T-cell receptor-associated CD3 complex, which is expressed on many thymocytes and mature T lymphocytes. Plate-bound mAb 17A2 has been reported to induce IL-2 production by T cells in the absence of accessory cells. Binding of 17A2 antibody to T cells can be blocked by the anti-CD3e mAb 145-2C11, suggesting that 17A2 antibody recognizes an epitope of the CD3 epsilon chain. In vivo treatment with 17A2 mAb has been reported to partially deplete T lymphocytes and temporarily down-modulates CD3 expression on T cells.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.

**Preparation and Storage**
The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was 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>
</tr>
</thead>
<tbody>
<tr>
<td>Flow cytometry</td>
<td></td>
</tr>
</tbody>
</table>

**CD3 expression in spleen and thymus.** BALB/c splenocytes were simultaneously stained with FITC-conjugated 17A2 and PE-conjugated anti-mouse CD19 mAb 1D3 (left panel). BALB/c thymocytes were also stained with FITC-conjugated 17A2 mAb (right panel). 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>
</tr>
</thead>
<tbody>
<tr>
<td>557399</td>
<td>PE Rat Anti-Mouse CD19</td>
<td>0.1 mg</td>
<td>ID3</td>
</tr>
<tr>
<td>553988</td>
<td>FITC Rat IgG2b, Kappa Isotype Control</td>
<td>0.25 mg</td>
<td>A95-1</td>
</tr>
</tbody>
</table>

### Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
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.

### References
