Technical Data Sheet

PE Mouse Anti-Rat CD4

**Product Information**

<table>
<thead>
<tr>
<th>Material Number:</th>
<th>551397</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size:</td>
<td>0.1 mg</td>
</tr>
<tr>
<td>Concentration:</td>
<td>0.2 mg/ml</td>
</tr>
<tr>
<td>Clone:</td>
<td>OX-38</td>
</tr>
<tr>
<td>Immunogen:</td>
<td>Rat thymocyte glycoproteins</td>
</tr>
<tr>
<td>Isotype:</td>
<td>Mouse (BALB/c) IgG2a, κ</td>
</tr>
<tr>
<td>Reactivity:</td>
<td>QC Testing: Rat</td>
</tr>
<tr>
<td>Storage Buffer:</td>
<td>Aqueous buffered solution containing ≤0.09% sodium azide.</td>
</tr>
</tbody>
</table>

**Description**

The OX-38 antibody has been reported to react with the CD4 antigen on most thymocytes, a subpopulation of mature T lymphocytes (i.e., MHC class II-restricted T cells, including most T helper cells), monocytes, macrophages, and some dendritic cells. CD4 is an antigen coreceptor on the T-cell surface which interacts with MHC class II molecules on antigen-presenting cells. It participates in T-cell activation through its association with the T-cell receptor complex and protein tyrosine kinase lck. The OX-38 antibody has been reported to bind to the same epitope of CD4 as that recognized by W3/25 mAb, which is a different epitope than that recognized by OX-35 mAb (Cat. No. 554837). In vivo blocking of some cell-mediated immune responses by mAb OX-38 has been reported. Injection of OX-38 mAb induces allograft unresponsiveness in rats, with varying results depending on the rat strain used (high or low responder). Furthermore, in vivo depletion of CD4+ lymphocytes has been reported with this antibody.

**Two-color analysis of the expression of CD4 on rat splenocytes.** A single-cell suspension of Lewis splenocytes was incubated simultaneously with PE anti-rat CD4 clone OX-38 and FITC anti-rat CD3 clone G4.18 (Cat. No. 559975) monoclonal antibodies. The CD3 negative CD4-dim cells are the monocyte/macrophage population. Flow cytometry was performed on a BD FACScan™ flow cytometry system.

**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**

**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>559975</td>
<td>FITC Mouse Anti-Rat CD3</td>
<td>0.1 mg</td>
<td>G4.18</td>
</tr>
<tr>
<td>553457</td>
<td>PE Mouse IgG2a, κ Isotype Control</td>
<td>0.1 mg</td>
<td>G155-178</td>
</tr>
</tbody>
</table>

**Product Notices**

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

BD Biosciences

bdbiosciences.com

United States Canada Europe Japan Asia Pacific Latin America/Caribbean
877.232.8995  888.268.5430  32.51.720.550  01.60.855.90  65.6861.0633  0800.771.7157

For country-specific contact information, visit bdbiosciences.com/how_to_order/

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2011 BD
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 Fluorochrome Web Page at www.bdbiosciences.com/colors.

References


