Technical Data Sheet

PE Rat Anti-Mouse CD45RA

Product Information

Material Number: 553380
Size: 0.2 mg
Concentration: 0.2 mg/ml
Clone: 14.8
Immunogen: Radiation-induced NZC mouse B lymphoma WEHI-279
Isotype: Rat IgG2b, κ
Reactivity: QC Testing: Mouse
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 14.8 clone has been reported to react with an exon A-dependent epitope of the CD45 protein, which is found at high density on B cells and at low density on peripheral T cytotoxic/suppressor cells and a very small subset of thymocytes. Nearly all B-lineage cells, including B-cell precursors in fetal liver and adult bone marrow and Ig-secreting cells, but not hematopoietic stem cells or myeloid progenitors, have been reported to be detectable by mAb 14.8. CD45 is a member of the Protein Tyrosine Phosphatase (PTP) family: Its intracellular (COOH-terminal) region contains two PTP catalytic domains, and the extracellular region is highly variable due to alternative splicing of exons 4, 5, and 6 (designated A, B, and C, respectively), plus, differing levels of glycosylation. The CD45 isoforms detected in the mouse are cell type-, maturation-, and activation state-specific. The CD45 isoforms play complex roles in T-cell and B-cell antigen receptor signal transduction. mAb 14.8 has been reported to enhance the proliferative effect of PHA on purified spleen T cells, possibly by replacing a signal normally delivered by accessory cells, to enhance isotype switching during in vitro B-cell responses, and to inhibit antigen-induced p21 [ras] activation.

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.

Application Notes

Application

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<tr>
<th>Application</th>
<th>Routinely Tested</th>
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<tr>
<td>Flow cytometry</td>
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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>553989</td>
<td>PE Rat IgG2b, κ Isotype Control</td>
<td>0.1 mg</td>
<td>A95-1</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/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


BD Biosciences

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