Technical Data Sheet

PE Rat Anti-Mouse CD122

Product Information

Material Number: 553362
Alternate Name: II2rb; IL-2Rbeta; IL-2Rβ; IL-15Rbeta; IL-2/15 Receptor-beta; IL-2/15Rbeta
Size: 0.2 mg
Concentration: 0.2 mg/ml
Clone: TM-β1
Immunogen: Mouse IL-2Rβ Transfected Cell Line
Isotype: Rat (SD) IgG2b, κ
Reactivity: QC Testing: Mouse
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The TM-β1 monoclonal antibody specifically recognizes the 90-100-kDa β chain shared by the IL-2 and IL-15 receptors (IL-2Rβ, CD122). In the periphery, CD122 is expressed on CD8+ T lymphocytes, NK cells, NK-T cells, dendritic epidermal T cells, subsets of intraepithelial lymphocytes, and macrophages. Small subsets of fetal and adult thymocytes constitutively express CD122. CD122+ cells in the bone marrow include committed NK-cell progenitors. IL-2Rβ expression is upregulated by IL-2. CD122 is a transmembrane glycoprotein of the hematopoietin receptor superfamily which can combine with CD132 (γc) alone or CD132 plus CD25 (IL-2Rα) to form intermediate or high-affinity IL-2 receptor complexes, respectively. The β chain of these complexes, CD122, is involved in signal transduction and immunoregulation. The TM-β1 antibody blocks high affinity binding of IL-2 or IL-15 to IL-2Rβ.

Flow cytometric analysis of CD122 expression on mouse splenic NK cells. C57BL/6 splenocytes were stained with PE-Cy™5 Rat Anti-Mouse CD8a (Cat. No. 553034/561094; Left Panels) or FITC Rat Anti-Mouse CD49b (Cat. No. 553857/561067; Right Panels) and PE Rat Anti-Mouse CD122 (Cat. No. 553362; Middle Left and Far Right Panels). Two-color contour plots were derived from gated events with the side and forward light-scattering characteristics of viable splenocytes. Flow cytometry was performed on a BD FACScan™ system.

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

| Application | 
| --- | --- |
| Flow cytometry | Routinely Tested |
| Blocking | Reported |

Suggested Companion Products

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<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
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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


