**FITC Rat Anti-Mouse CD249 (Ly-51)**

**Product Information**
- Material Number: 562057
- Alternate Name: Bp-1/6C3; Ly51; Ly-51; Enpep; Glutamyl aminopeptidase; APA; EAP
- Size: 50 µg
- Concentration: 0.5 mg/ml
- Clone: 6C3
- Immunogen: C57L mouse Pre-B lymphoma cell line L1-2
- Isotype: Rat (F344) IgG2a, κ
- Reactivity: QC Testing: Mouse
- Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

**Description**
The 6C3 monoclonal antibody specifically recognizes CD249 which is also known as, 6C3/BP-1, Enpep, or Ly-51. CD249 is a glycoprotein cell-surface differentiation antigen, which was originally identified on pre-B cell lymphomas (spontaneous and chemical- or retrovirus-transformed, in vitro and in vivo). CD249 is a homodimeric cell-surface glycoprotein with 140-kDa subunits that has been identified to possess aminopeptidase A (APA) activity. The same antigen is expressed at high levels on bone marrow stromal cell lines which support in vitro B lymphopoesis, on thymic dendritic cells and cortical epithelial cells, and on a wide variety of mouse and rat tissues known to possess APA activity. Subsets of normal bone marrow pre-B and B lymphocytes express low levels of CD249 which is rapidly up-regulated on the pre-B cells in the presence of IL-7. A role for the CD249 molecule in the IL-7-driven proliferation of B cell precursors has been postulated. However, B-cell abnormalities were not detected in CD249/Ly-51-deficient mice. Mature B lymphocytes, thymocytes, peripheral T lymphocytes, erythroid cells, and myeloid cells (with the exception of thymic dendritic cells) do not express CD249. The 6C3 antibody can be used to identify cortical epithelium in frozen sections of thymuses from normal, SCID, and TCR-transgenic mice. It is possible that the low level of CD249 antigen detected, by flow cytometry, on some thymocytes may be passively adsorbed from adjacent epithelial cells during preparation of the cell suspensions.

**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 FITC under optimum conditions, and unreacted FITC was removed.

**Application Notes**

**Application**
- Flow cytometry Routinely Tested

**Suggested Companion Products**

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<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<td>Stain Buffer (FBS)</td>
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<td>553929</td>
<td>FITC Rat IgG2a, κ Isotype Control</td>
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<td>Stain Buffer (BSA)</td>
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<td>FITC Rat Anti-Mouse CD249 (Ly-51)</td>
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<td>6C3</td>
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</table>

**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**

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**BD Biosciences**

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