Anti-Mouse Sca-1 (Ly-6A.2/6E.1)
Monoclonal Antibody

<table>
<thead>
<tr>
<th>Catalogue#</th>
<th>Format</th>
<th>Size</th>
<th>Concentration</th>
<th>Isotype Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL8934AP</td>
<td>Purified</td>
<td>250µg</td>
<td>1.0 mg/ml</td>
<td>CLCR2B00</td>
</tr>
<tr>
<td>CL8934PE/-3</td>
<td>PE</td>
<td>50µg/300µg</td>
<td>0.1 mg/ml</td>
<td>CLCR2B04</td>
</tr>
</tbody>
</table>

Isotype: Rat IgG_{2b}

DESCRIPTION:
Cedarlane’s monoclonal antibody recognizes Sca-1 (Ly-6A.2/6E.1), a cell surface antigen used in the identification of hematopoietic stem cells. It is a member of the Ly-6 antigen family. The Thy-1^lo, Lin^- (lineage-negative, not expressing B220, Gr-1, Mac-1, CD4 or CD8), Sca-1^+ population of bone marrow cells are highly purified, perhaps homogenous, pluripotent stem cells. This antigen is also present on various other tissues. Specific staining of the parenchymal cells can be demonstrated in thymus, spleen and kidney whereas only vasculature reacts with anti-Sca-1 in brain, heart and liver (and possibly in lung). Also, Sca-1 is a T cell activation antigen, as surface expression of the antigen increases upon Con A activation of T lymphocytes. Sca-1 appears to have a molecular mass of 8 kDa under non-reducing conditions and 18 kDa under reducing conditions, indicating the presence of intra-chain disulfide bonds.

PRESENTATION:
Purified: Purified IgG buffered in PBS and 0.02% NaN_3. (Purified from ascitic fluid via Protein G Chromatography). For maximum recovery of contents, spin down tube before use.
PE: PE conjugated IgG buffered in PBS, 0.02% NaN_3 and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml.

STORAGE/STABILITY:
For all formats, store at 4°C. DO NOT FREEZE PE conjugates. For long term storage (Purified), aliquot and freeze unused portion at -20°C in volumes appropriate for single usage. Avoid freeze/thaw cycles.

SPECIFICATIONS:
Clone: CT-6A/6E
Specificity: Mouse Sca-1 (Ly-6A.2/6E.1)
TEST RESULTS:

Tissue Distribution by Flow Cytometry Analysis:

Mouse Strain: Balb/C
Cell Concentration: 1 x 10^6 cells per test
Antibody Concentration Used: 1.0 µg/10^6 cells

<table>
<thead>
<tr>
<th>Cell population</th>
<th>Percentage of cells stained above control:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Con A Activated Splenocytes</td>
<td>95.6%</td>
</tr>
<tr>
<td>Bone Marrow</td>
<td>21.7%</td>
</tr>
</tbody>
</table>

Cell Source: Con A Activated Splenocytes

N.B. Appropriate control samples should always be included in any labeling studies.
* For optimal results in various applications, it is recommended that each investigator determine dilutions appropriate for individual use.

REFERENCES: