Technical Data Sheet

FITC Rat Anti-Mouse CD62L

Product Information

Material Number: 553150
Alternate Name: L-selectin, LECAM-1, Ly-22
Size: 0.5 mg
Concentration: 0.5 mg/ml
Clone: MEL-14
Immunogen: C3H/emb mouse B lymphoma 38C-13
Isotype: Rat (F344) IgG2a, κ
Reactivity: QC Testing: Mouse
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The MEL-14 antibody reacts with CD62L (L-selectin), a 95 kDa (on neutrophils) or 74 kDa (on lymphocytes) receptor with lectin-like and Epidermal Growth Factor-like domains. In the mouse, L-selectin is detected on most thymocytes, with the highest levels of expression on an immunocompetent subset and a population of dividing progenitor cells, and on peripheral leukocytes, including subsets of B and T lymphocytes, neutrophils, monocytes, and eosinophils. This member of the selectin adhesion molecule family appears to be required for lymphocyte homing to peripheral lymph nodes and to contribute to neutrophil emigration at inflammatory sites. L-selectin is rapidly shed from lymphocytes and neutrophils upon cell activation, metalloproteinases may mediate the release of CD62L ectodomains from the cell surface. The level of CD62L expression, along with other markers, distinguishes naive, effector, and memory T cells. L-selectin binds to sialylated oligosaccharide determinants on high endothelial venules (HEV) in peripheral lymph nodes. In vitro studies have demonstrated that CD34, GlyCAM-1, and MAICAM-1, all recognized by mAb MECA-79 (anti-mouse PNAd Carbohydrate Epitope, Cat. No. 553063/553064, both panels), may be ligands for CD62L. MEL-14 mAb blocks in vitro binding of lymphocytes to peripheral lymph node HEV and inhibits in vivo lymphocyte extravasation into peripheral lymph nodes and late stages of leukocyte rolling.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.

Preparation and Storage

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. Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Two-color analysis of CD62L expression on spleen lymphocytes. BALB/c splenocytes were simultaneously stained with FITC-conjugated MEL-14 (right panel) and PE-conjugated anti-mouse CD3e 145-2C11 (Cat. No. 553063/553064, both panels) monoclonal antibodies. 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 FITC under optimum conditions, and unreacted FITC was removed. Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.
Application Notes

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>553063</td>
<td>PE Hamster Anti-Mouse CD3e</td>
<td>0.1 mg</td>
<td>145-2C11</td>
</tr>
<tr>
<td>553929</td>
<td>FITC Rat IgG2a, κ Isotype Control</td>
<td>0.25 mg</td>
<td>R35-95</td>
</tr>
</tbody>
</table>

Product Notices

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

References


