Technical Data Sheet

FITC Rat Anti-Mouse CD11a

Product Information

Material Number: 553120
Alternate Name: Itgal; Integrin alpha-L; Integrin αL; ITAL; LFA-1A; LFA-1α; Ly-15
Size: 0.5 mg
Concentration: 0.5 mg/ml
Clone: 2D7
Isotype: Rat IgG2a, κ
Reactivity: QC Testing: Mouse
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 2D7 monoclonal antibody specifically binds to the 180-kDa αL chain of LFA-1 (CD11a/CD18, αLβ2 integrin), a heterodimeric surface glycoprotein expressed on almost all leukocytes. CD8α+CD8β- intestinal intraepithelial T lymphocytes, which are believed to be thymus independent, do not express CD11a. LFA-1 mediates a variety of heterotypic and homotypic intracellular adhesions through interaction with ICAM-1 (CD54) and ICAM-2 (CD102), including participation in the immunological synapses between CD8+ T lymphocytes and antigen-presenting cells. mAb 2D7 has been reported to block an in vitro allogeneic mixed-leukocyte reaction. The 2D7 and M17/4 (Cat. No. 553337, for the NA/LE™ format) antibodies are reported to recognize different epitopes of the CD11a molecule.

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.

Application Notes

Application

<table>
<thead>
<tr>
<th>Flow cytometry</th>
<th>Routinely Tested</th>
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<tbody>
<tr>
<td>Immunofluorescence</td>
<td>Tested During Development</td>
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Multiparameter flow cytometric analysis of CD11a expression on mouse bone-marrow cells. BALB/c mouse bone-marrow cells were stained with either FITC Rat IgG2a, κ Isotype Control (Cat. No. 553929; dashed line histograms) or FITC Rat Anti-Mouse CD11a (Cat. No. 553120/551683; solid line histogram). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of lymphoid (Left Panel) or myeloid (Right Panel) cells.
### Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>553929</td>
<td>FITC Rat IgG2a, κ Isotype Control</td>
<td>0.25 mg</td>
<td>R35-95</td>
</tr>
<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
<td>500 mL</td>
<td>(none)</td>
</tr>
<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</td>
<td>500 mL</td>
<td>(none)</td>
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<tr>
<td>561683</td>
<td>FITC Rat Anti-Mouse CD11a</td>
<td>0.1 mg</td>
<td>2D7</td>
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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