Technical Data Sheet

BV421 Rat Anti-Mouse Ly-6C

Product Information

Material Number: 562727
Alternate Name: Ly6c; Lymphocyte antigen 6 complex, locus C; Lymphocyte antigen Ly-6C
Size: 50 µg
Concentration: 0.2 mg/ml
Clone: AL-21
Isotype: Rat IgM, k
Reactivity: QC Testing: Mouse
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The AL-21 monoclonal antibody specifically binds to a non-polymorphic determinant of Ly-6C, a 14-17 kDa GPI-linked cell-surface antigen found on some monocyte/macrophage populations, granulocytes, endothelial cells, plasma cells, and thymocyte, NK-cell, and T-subsets. Mice with the Ly-6.2 alloantigen (eg, AKR, C57BL, C57BR, C57L, C58, DBA/2, PL, SJL, SWR, 129) have subsets of CD8+ and CD4+ Ly-6C+ T cells, while Ly-6.1 strains (eg, A, BALB/c, CBA, C3H/He, DBA/1, NZB) have only CD8+ Ly-6C+ T cells. Upregulation of Ly-6C expression on CD8+ T cells by interferons α and β and poly (I:C) has been described, and Ly-6C is a memory marker on CD8+ T cells.

The antibody was conjugated to BD Horizon™ BV421 which is part of the BD Horizon Brilliant™ Violet family of dyes. With an Ex Max of 407-nm and Em Max at 421-nm, BD Horizon™ BV421 can be excited by the violet laser and detected in the standard Pacific Blue™ filter set (eg, 450/50-nm filter). BD Horizon™ BV421 conjugates are very bright, often exhibiting a 10 fold improvement in brightness compared to Pacific Blue™ conjugates.

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 BD Horizon™ BV421 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV421 were removed.
Application Notes

Application

<table>
<thead>
<tr>
<th>Flow cytometry</th>
<th>Routinely Tested</th>
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</thead>
<tbody>
<tr>
<td>Immunofluorescence</td>
<td>Tested During Development</td>
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</tbody>
</table>

Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>553031</td>
<td>FITC Rat Anti-Mouse CD8a</td>
<td>0.5 mg</td>
<td>53-6.7</td>
</tr>
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<td>553030</td>
<td>FITC Rat Anti-Mouse CD8a</td>
<td>0.1 mg</td>
<td>53-6.7</td>
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<td>561966</td>
<td>FITC Rat Anti-Mouse CD8a</td>
<td>25 µg</td>
<td>53-6.7</td>
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<td>562708</td>
<td>BV421 Rat IgM, κ Isotype Control</td>
<td>50 µg</td>
<td>R4-22</td>
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<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
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<td>(none)</td>
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<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</td>
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<td>554655</td>
<td>Fixation Buffer</td>
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<td>557669</td>
<td>Alexa Fluor® 488 Rat Anti-Mouse CD45R</td>
<td>0.1 mg</td>
<td>RA3-6B2</td>
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<tr>
<td>564907</td>
<td>DAPI Solution</td>
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<tr>
<td>563794</td>
<td>Brilliant Stain Buffer</td>
<td>100 Tests</td>
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</tr>
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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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. 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.
5. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
7. BD Horizon Brilliant Violet 421 is covered by one or more of the following US patents: 8,158,444; 8,362,193; 8,575,303; 8,354,239.
8. BD Horizon Brilliant Stain Buffer is covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,575,303; 8,354,239.
9. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.

References


