BD Horizon™

Technical Data Sheet

BV421 Mouse Anti-Human CD1c

Product Information

Material Number: 565050
Alternate Name: CD1; R7; M241; BDCA1
Size: 100 Tests
Vol. per Test: 5 µl
Clone: F10/21A3
Isotype: Mouse IgG1, κ
Reactivity: QC Testing: Human
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The F10/21A3 monoclonal antibody specifically binds to CD1c. The CD1 family of transmembrane glycoproteins are structurally related to the classical major histocompatibility complex (MHC) proteins. CD1c is a type I transmembrane glycoprotein that forms heterodimers with beta-2-microglobulin. CD1c presents lipids and glycolipids of self or microbial origin to T cells. CD1c is expressed by Langerhans cells, dendritic cells, monocytes, cortical thymocytes, T cells, and some B 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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</table>

Two-color flow cytometric analysis of CD1c expression on human peripheral blood lymphocytes. Human whole blood was stained with FITC Mouse Anti-Human CD19 antibody (Cat. No. 555412/560994) and either BD Horizon™ BV421 Mouse IgG1, κ Isotype Control (Cat. No. 562438; Left Panel) or BD Horizon™ BV421 Mouse Anti-Human CD1c (Cat. No. 565050/565051; Right Panel). Erythrocytes were lysed with BD FACS Lysing Solution (Cat. No. 349202). Two-color flow cytometric contour plots showing the correlated expression of CD1c (or Ig Isotype control staining) versus CD19 were derived from gated events with the forward and side light-scatter characteristics of intact lymphocytes. Flow cytometric analysis was performed using a BD™ LSR II Flow Cytometer System.
## Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Stain Buffer (FBS)</td>
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<td>BV421 Mouse IgG1, κ Isotype Control</td>
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<td>BV421 Mouse Anti-Human CD1c</td>
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<td>555412</td>
<td>FITC Mouse Anti-Human CD19</td>
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<td>HIB19</td>
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<td>560994</td>
<td>FITC Mouse Anti-Human CD19</td>
<td>25 Tests</td>
<td>HIB19</td>
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## Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use $1 \times 10^6$ cells in a 100-µl experimental sample (a test).
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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
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.

## References

