BV421 Mouse Anti-Human CD86

Product Information

Material Number: 562432
Alternate Name: B7.2; B7-2; B-lymphocyte activation antigen B7-2; B70; BU63; CD28LG2; LAB72
Size: 100 tests
Vol. per Test: 5 µl
Clone: 2331 (FUN-1)
Immunogen: Human HBL-1 Cell Line
Isotype: Mouse (BALB/c) IgG1, κ
Reactivity: QC Testing: Human
Workshop: V B046, BP126
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The 2331 (FUN-1) monoclonal antibody specifically recognizes a 75 kDa transmembrane cell surface protein, CD86 (B70/B7-2), expressed primarily on monocytes, dendritic cells and activated B cells. Competitive binding assays demonstrate that, while both 2331 (FUN-1) and IT2.2 (anti-CD86, Cat. No. 555663) antibodies specifically recognize the same molecule, they react with different epitopes. CD86 is the second ligand for CD28 and CTLA-4 and may play an important role in co-stimulation of T cells in primary immune response. The 2331 (FUN-1) antibody blocks the costimulatory activity of CD86 when tested in functional studies.

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

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>554656</td>
<td>Stain Buffer (FBS)</td>
<td>500 ml</td>
<td>(none)</td>
</tr>
<tr>
<td>562438</td>
<td>BV421 Mouse IgG1, κ Isotype Control</td>
<td>50 µg</td>
<td>X40</td>
</tr>
<tr>
<td>562433</td>
<td>BV421 Mouse Anti-Human CD86</td>
<td>25 tests</td>
<td>2331 (FUN-1)</td>
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</tbody>
</table>

Flow cytometric analysis of CD86 expression on Daudi cells. Human Daudi cells (ATCC CCL-213) were stained with either BD Horizon™ BV421 Mouse anti-Human CD86 antibody (Cat. No. 562432/562433; solid line histogram) or with BD Horizon™ BV421 Mouse IgG1, κ Isotype Control (Cat. No. 562438; dashed line histogram). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable cells. Flow cytometry was performed using a BD FACSCanto™ II Flow Cytometer System.
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. Brilliant Violet™ 421 is a trademark of Sirigen.
4. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
5. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
6. 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.
8. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

References

Engel P, Gribben JG, Freeman GJ, et al. The B7-2 (B70) costimulatory molecule expressed by monocytes and activated B lymphocytes is the CD86 differentiation antigen. Blood. 1994; 84(5):1402-1407. (Biology)
Yang XF, Chen Z, Wormsley SB. Nashville: American Society of Hematology; 1994. (Biology)