Technical Data Sheet

BV421 Mouse Anti-Human CD23

Product Information

Material Number: 562707
Alternate Name: FCER2; FcεRII; Low affinity immunoglobulin epsilon Fc receptor; BLAST-2
Size: 100 tests
Vol. per Test: 5 µl
Clone: M-L233
Isotype: Mouse IgG1, κ
Reactivity: QC Testing: Human
Workshop: V CD23.15
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The M-L233 antibody specifically binds to human CD23, the low affinity receptor for human IgE (FcεRII). CD23 is a type II membrane glycoprotein that can be expressed by B cells, monocytes, macrophages, eosinophils, platelets and dendritic cells. CD23 can mediate IgE-dependent cytotoxicity and phagocytosis by macrophages and eosinophils. Soluble CD23 (sCD23) can be released by CD23-positive cells as a result of proteolytic cleavage of membrane CD23. Larger fragments of sCD23 (e.g., 25-37 kDa) retain their IgE-binding capacity whereas smaller fragments (i.e., ≤ 12 kDa) do not. Soluble CD23 may have immunoregulatory effects on the growth and differentiation of B cells and other cell types.

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 (e.g., 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>562438</td>
<td>BV421 Mouse IgG1, k Isotype Control</td>
<td>50 µg</td>
<td>X40</td>
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<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
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<td>Lysing Buffer</td>
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<td>APC Mouse Anti-Human CD19</td>
<td>100 tests</td>
<td>HIB19</td>
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<td>APC Mouse Anti-Human CD19</td>
<td>25 tests</td>
<td>HIB19</td>
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</table>

**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.
7. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

**References**


Delespesse G, Hofstetter H, Sarfati M. Low-affinity receptor for IgE (FcERII, CD23) and its soluble fragments. *Int Arch Allergy Immunol*. 1989; 90(1):41-44. (Biology)

