Technical Data Sheet

Alexa Fluor® 700 Mouse Anti-Human CD23

Product Information

Material Number: 563673
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 protein stabilizer 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.

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 to Alexa Fluor® 700 under optimum conditions, and unreacted Alexa Fluor® 700 was removed.

Application Notes
Application
Flow cytometry Routinely Tested

Two-color flow cytometric analysis of CD23 expression on human peripheral blood lymphocytes. Whole blood was stained with BD Horizon™ PE-CF594 Mouse Anti-Human CD19 antibody (Cat. No. 562294/562321) and either Alexa Fluor® 700 Mouse IgG1, κ Isotype Control (Cat. No. 557882; Left Panel) or Alexa Fluor® 700 Mouse Anti-Human CD23 antibody (Cat. No. 563673; Right Panel). The erythrocytes were lysed with BD FACS™ Lysing Solution (Cat. No. 349202). Two-color flow cytometric dot plots show the correlated expression patterns of CD23 (or Ig isotype control staining) versus CD19 for 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>
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<tbody>
<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
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<tr>
<td>557882</td>
<td>Alexa Fluor® 700 Mouse IgG1, κ Isotype Control</td>
<td>0.1 mg</td>
<td>MOPC-21</td>
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<td>562294</td>
<td>PE-CF594 Mouse Anti-Human CD19</td>
<td>100 tests</td>
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<td>562321</td>
<td>PE-CF594 Mouse Anti-Human CD19</td>
<td>25 tests</td>
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<td>BD FACSTM Lysing Solution</td>
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<td>555899</td>
<td>Lysing Buffer</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. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
5. Alexa Fluor® 700 has an adsorption maximum of ~700nm and a peak fluorescence emission of ~720nm. Before staining cells with this reagent, please confirm that your flow cytometer is capable of exciting the fluorochrome and discriminating the resulting fluorescence.
6. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
7. CFSTM is a trademark of Biotium, Inc.
8. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

### References


