Technical Data Sheet

PE Mouse Anti-Human CD32

Product Information

Material Number: 552884
Alternate Name: FcγRII; CD32a/FcγRIIA/FCGR2A; CD32b/FcγRIIB/FCGR2B
Size: 100 Tests
Vol. per Test: 20 µl
Clone: 3D3
Isotype: Mouse IgG1, κ
Reactivity: QC Testing: Human
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The 3D3 monoclonal antibody specifically recognizes FcγRII (CD32), a 40 kDa, polymorphic type I transmembrane glycoprotein that serves as a low affinity receptor for aggregated IgG. This highly glycosylated molecule (encoded by at least two different genes) is expressed on monocytes, granulocytes, platelets and B cells. Unlike the FLI28.26 mAb, the 3D3 mAb detected a polymorphic CD32 antigen expressed on B cells of all donors, but only on platelets, monocytes and granulocytes of some donors. The platelets from 3D3+ donors respond to certain stimulatory mAb such as CD165 (clone SN2) which results in aggregation. On the other hand, the platelets from 3D3 negative donors do not form aggregates after stimulation. Individuals can be divided into two groups as responder and non-responder depending on expression or non-expression, of 3D3. In comparison to the 3D3 mAb, the FLI8.26 mAb detects a monomorphic CD32 antigen expressed on all human donors.

Flow cytometric analysis of CD32 expression on human peripheral blood granulocytes. Whole blood from responders (Left Panel) and non-responders (Right Panel) were stained with either PE Mouse IgG1, κ isotype Control (Cat. No. 555749; open histogram) or PE Mouse Anti-Human CD32 (Cat. No. 552884; filled histogram). Erythrocytes were lysed with BD FACS™ Lysing Solution (Cat. No. 349202). Fluorescent histograms were derived from gated events with the side and forward light-scatter characteristics of viable granulocytes.

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 R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Application Notes

Application

Flow cytometry  Routinely Tested
Suggested Companion Products

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<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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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. 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. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

References
