PE Mouse Anti-Human IREM-1 (CD300f)

Product Information

Material Number: 565450
Alternate Name: CD300f; CD300LF; IREM1; NKIR; CLM-1; CLM1; IGSF13
Size: 100 Tests
Vol. per Test: 5 µl/test
Clone: UP-D1
Immunogen: Human Recombinant IREM-1 Protein
Isotype: Mouse (BALB/c) IgG1, κ
Reactivity: QC Testing: Human
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The UP-D1 monoclonal antibody specifically binds to Immune receptor expressed on myeloid cells 1 (IREM-1). IREM-1 is encoded by CD300LF. It is also known as CD300 antigen-like family member F (CD300f), CMRF35-like molecule 1 (CLM-1/CLM1), NK inhibitory receptor (NKIR), or Immunoglobulin superfamily member 13 (IgSF13). IREM-1/CD300f is expressed on monocytes, dendritic cells, granulocytes, and mast cells. IREM-1 is a single-pass type I transmembrane glycoprotein that belongs to the CMRF family of the Ig gene superfamily. The long intracellular region of IREM-1 contains two classical immunoreceptor tyrosine-based inhibitory motifs (ITIM). Ligand-bound IREM-1 can transduce negative regulatory signals intracellularly by recruiting SHP1 or SHIP phosphatases that in turn dephosphorylate tyrosine residues within activating cell signaling molecules. CD300f may thus play a role in regulating inflammatory responses involving myeloid cells.

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

<table>
<thead>
<tr>
<th>Flow cytometry</th>
<th>Routinely Tested</th>
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Two-parameter flow cytometric analysis of IREM-1 (CD300f) expression on human peripheral blood leucocytes. Whole blood cells were stained with either PE Mouse IgG1, κ Isotype Control (Cat. No. 554680, Left Panel) or PE Mouse anti-Human IREM-1 (CD300f) antibody (Cat. No. 565450; Right Panel). The erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899). Two-parameter flow cytometric contour plots showing the correlated expression of IREM-1 (CD300f) [or Ig Isotype control staining] versus side light-scatter signals (SSC) were derived from gated events with the forward and side light-scatter characteristics of intact leucocyte populations. Flow cytometric analysis was performed using a BD FACSCanto™ 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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<td>554657</td>
<td>Stain Buffer (BSA)</td>
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<td>MOPC-21</td>
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<td>555899</td>
<td>Lysing Buffer</td>
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<tr>
<td>349202</td>
<td>BD FACSTM Lysing Solution</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 × 10^6 cells in a 100-µl experimental sample (a test).
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. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
5. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
6. An isotype control should be used at the same concentration as the antibody of interest.

References