Anti-MHC Class II antibodies, mouse

For research use only

30 µg equal 100 tests, 150 µg equal 500 tests. One test corresponds to labeling of 10 cells.

Product	Content	Order no.
Anti-MHC Class II-Biotin	30 µg in 200 µL	130-112-385
Anti-MHC Class II-FITC	30 µg in 200 µL	130-112-386
Anti-MHC Class II-FITC	150 µg in 1 mL	130-112-229
Anti-MHC Class II-PE	30 µg in 200 µL	130-112-387
Anti-MHC Class II-PE	150 µg in 1 mL	130-112-230
Anti-MHC Class II-APC	30 µg in 200 µL	130-112-388
Anti-MHC Class II-APC	150 µg in 1 mL	130-112-231
Anti-MHC Class II-VioBlue	30 µg in 200 µL	130-112-394
Anti-MHC Class II-VioBlue	150 µg in 1 mL	130-112-237
Anti-MHC Class II-VioGreen	30 µg in 200 µL	130-112-395
Anti-MHC Class II-VioGreen	150 µg in 1 mL	130-112-238
Anti-MHC Class II-PE-Vio615	30 µg in 200 µL	130-112-393
Anti-MHC Class II-PE-Vio615	150 µg in 1 mL	130-112-236
Anti-MHC Class II-PE-Vio770	30 µg in 200 µL	130-112-389
Anti-MHC Class II-PE-Vio770	150 µg in 1 mL	130-112-232
Anti-MHC Class II-APC-Vio770	150 µg in 1 mL	130-112-233
Anti-MHC Class II-PerCP-Vio700	30 µg in 200 µL	130-112-391
Anti-MHC Class II-PerCP-Vio700	150 µg in 1 mL	130-112-234
Anti-MHC Class II-Biotin	150 µg in 1 mL	130-112-228

Warnings

Reagents contain sodium azide. Under acidic conditions sodium azide yields hydrazoic acid, which is extremely toxic. Azide compounds should be diluted with running water before discarding. These precautions are recommended to avoid deposits in plumbing where explosive conditions may develop.

Technical data and background information

Antigen	MHC Class II
Clone	REA813
Isotype	recombinant human IgG1
Isotype control	REA Control antibodies
Alternative names of antigen	H2-AB1, Abeta, H-2Ab, H2-Ab, I-Abeta, IAb, Ia-2, Ia2, Rmcs1
Entrez Gene ID	14961

Molecular mass of antigen [kDa]	27
Distribution of antigen	dendritic cells, monocytes, macrophages, epithelial cells, cancer stem cells, hematopoietic cells
Product format	Reagents are supplied in buffer containing stabilizer and 0.05% sodium azide.
Fixation	The antibody is suited for staining of formaldehyde-fixed cells.
Storage	Store protected from light at 2–8 °C. Do not freeze.

Clone RAE813 recognizes the MHC class II alloantigens I-Ab, I-Aq, I-Ad, I-Ed, and I-Ek that are expressed by most common inbred mouse strains, for example, C57BL/6, BALB/c, or 129/SvEv 1. MHC class II is expressed on antigen-presenting cells, such as dendritic cells, monocytes/macrophages, B cells in lymphoid and non-lymphoid tissue, thymic epithelial cells, and on subsets of hematopoietic progenitor cells in the bone marrow. Additional information: Clone REA813 displays negligible binding to Fc receptors.

Reagent requirements

- Buffer: Prepare a solution containing phosphate-buffered saline (PBS), pH 7.2, 0.5% bovine serum albumin (BSA), and 2 mM EDTA by diluting MACS® BSA Stock Solution (# 130-091-376) 1:20 with autoMACS® Rinsing Solution (# 130-091-222). Keep buffer cold (2−8 °C).
  Note: EDTA can be replaced by other supplements such as anticoagulant citrate dextrose formula-A (ACD-A) or citrate phosphate dextrose (CPD). Buffers or media containing Ca^{2+} or Mg^{2+} are not recommended for use.
- (Optional) Fluorochrome-conjugated anti-biotin antibodies, e.g., Anti-Biotin-PE (# 130-090-756) as secondary antibody reagent in combination with biotinylated antibodies.
- (Optional) Propidium Iodide Solution (# 130-093-233) for flow cytometric exclusion of dead cells without fixation.
- (Optional) Fixation and Dead Cell Discrimination Kit (# 130-091-163) for cell fixation and flow cytometric exclusion of dead cells.

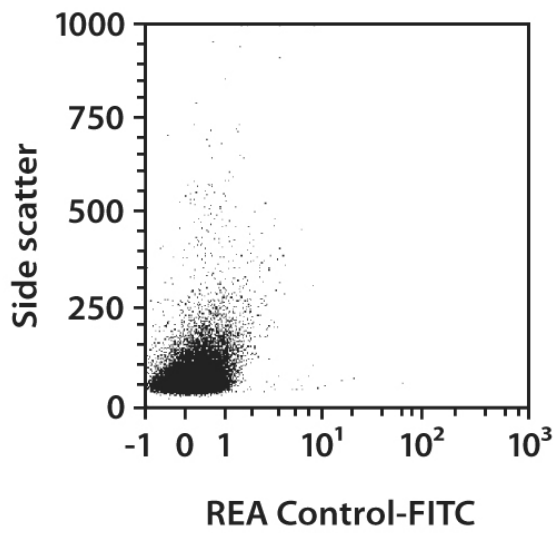
Protocol for cell surface staining

- The recommended antibody dilution for labeling of cells and subsequent analysis by flow cytometry is 1:50 for up to 10^6 cells/100 µL.
- Volumes given below are for up to 10^6 nucleated cells. When working with fewer than 10^6 cells, use the same volumes as indicated. When working with higher cell numbers, scale up all reagent volumes and total volumes accordingly.

1. Determine cell number.
2. Centrifuge cell suspension at 300×g for 10 minutes. Aspirate supernatant completely.
3. Resuspend up to 10^6 nucleated cells per 98 µL of buffer.
4. Add 2 µL of the antibody.
5. Mix well and incubate for 10 minutes in the dark in the refrigerator (2−8 °C).
   Note: Higher temperatures and/or longer incubation times may lead to non-specific cell labeling. Working on ice requires increased incubation times.
6. Wash cells by adding 1−2 mL of buffer and centrifuge at 300×g for 10 minutes. Aspirate supernatant completely.
7. (Optional) If biotinylated antibody was used, resuspend the cell pellet in buffer and stain with fluorochrome-conjugated anti-biotin antibody according to the manufacturer's recommendations.
8. Resuspend cell pellet in a suitable amount of buffer for analysis by flow cytometry or fluorescence microscopy.

Examples of immunofluorescent staining

Splenocytes of C57BL/6 mice were stained with Anti-MHC Class II antibodies or with the corresponding REA control antibodies (left image). Flow cytometry was performed with the MACSQuant®Analyzer. Cell debris and dead cells were excluded from the analysis based on scatter signals and propidium iodide fluorescence or 4',6-diamidino-2-phenylindole (DAPI) fluorescence, as in the case of tandem conjugates.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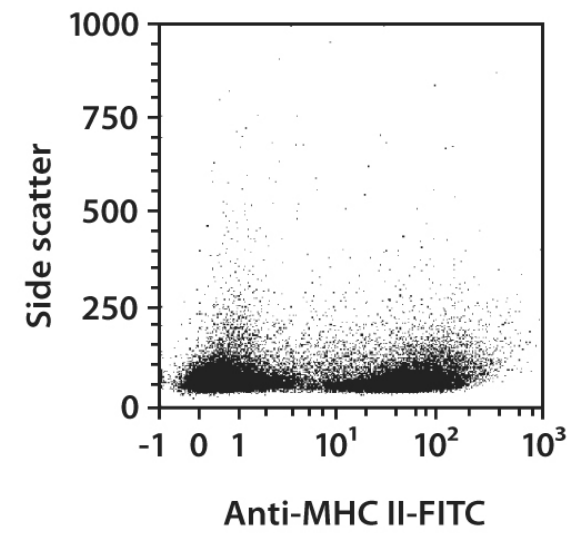
REA Control-FITC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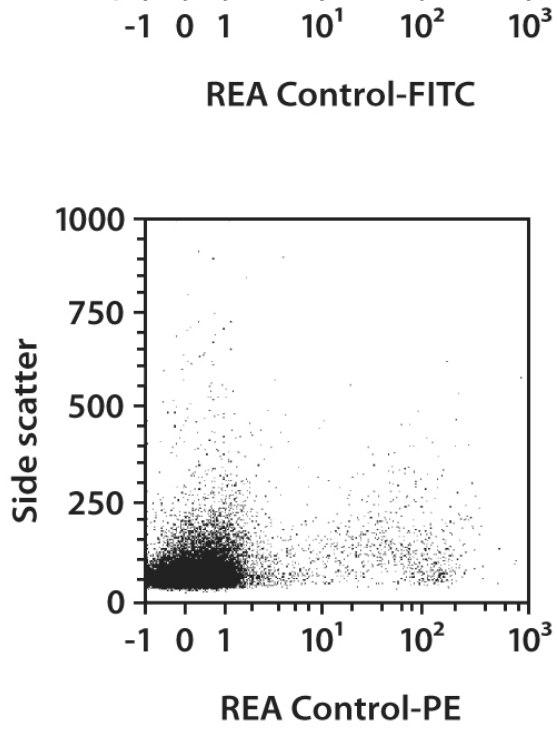
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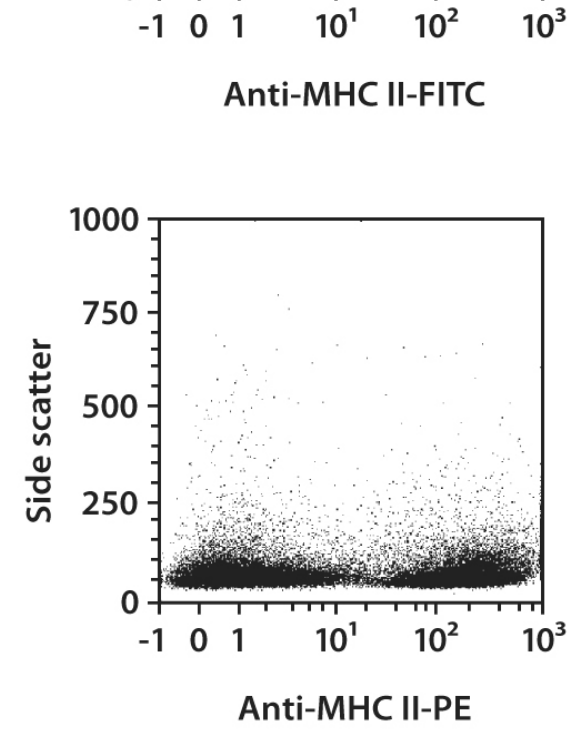
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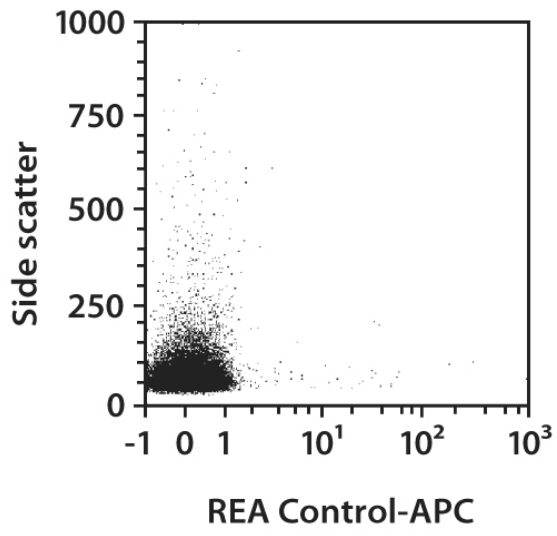
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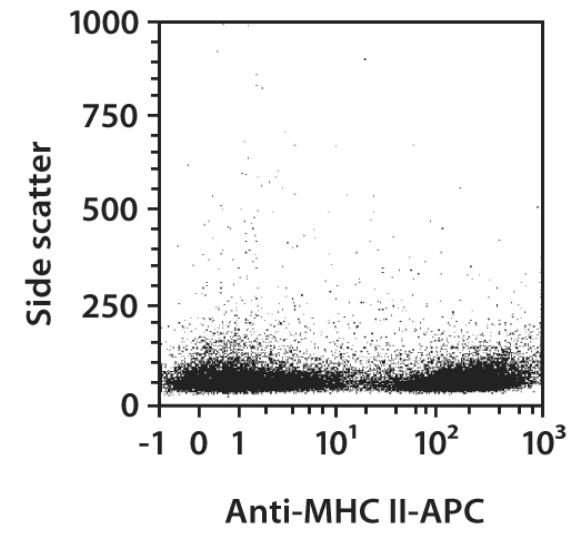
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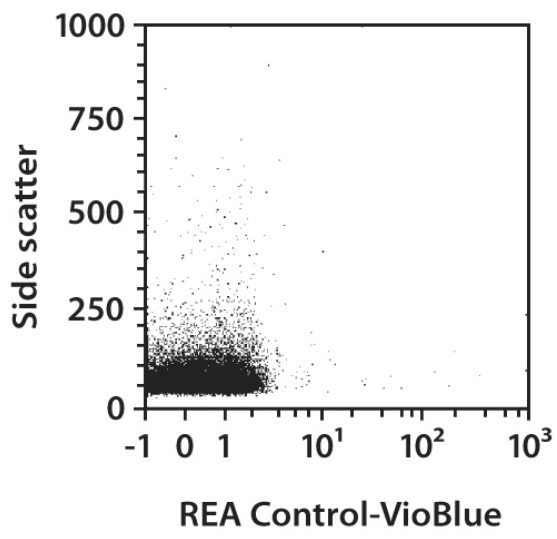
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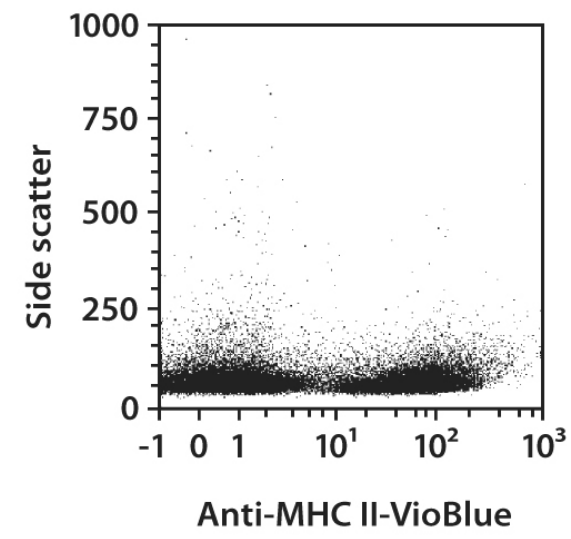
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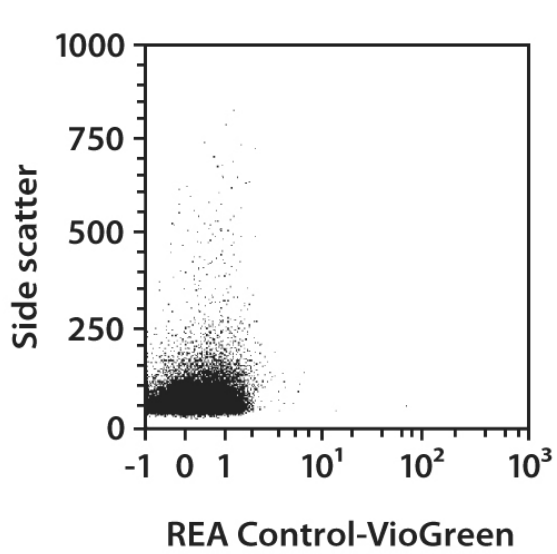
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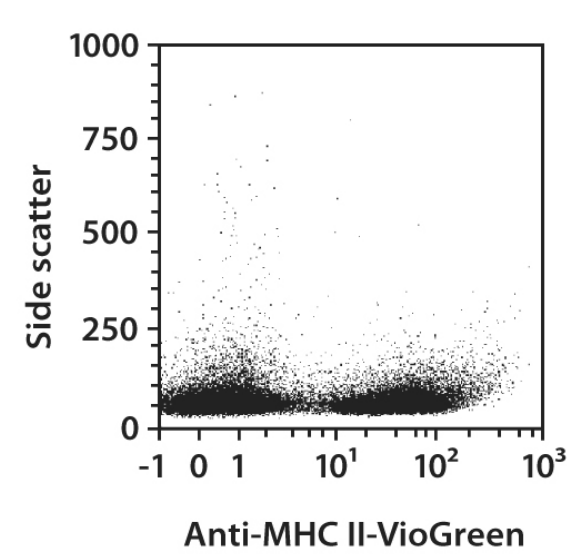
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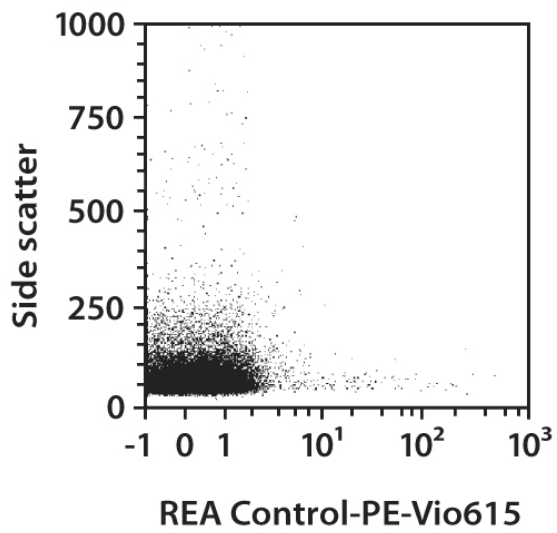

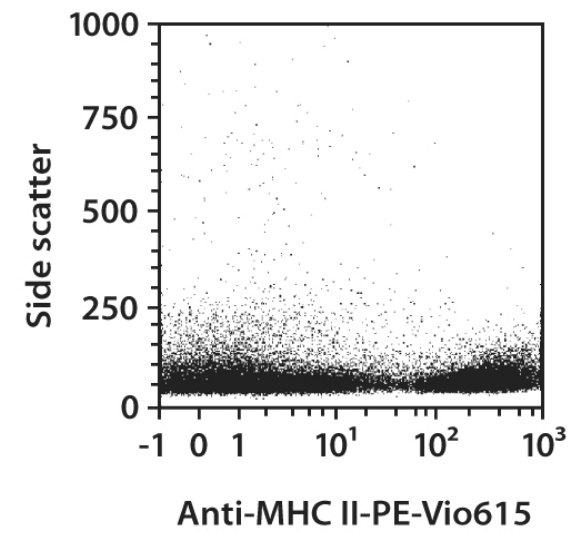

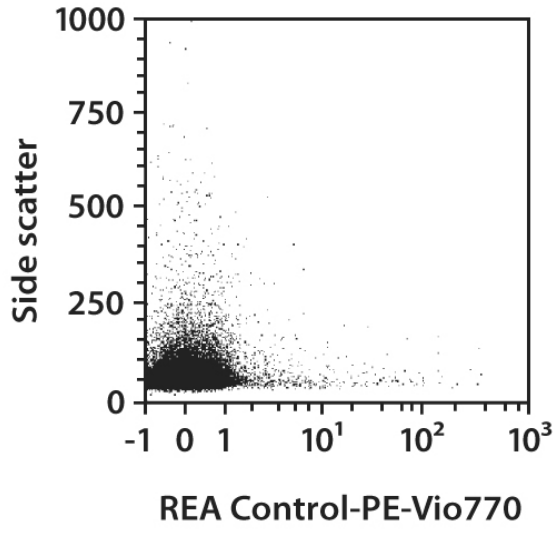

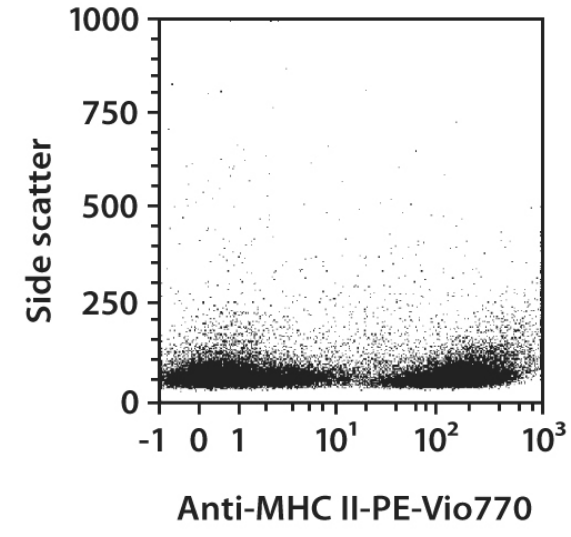

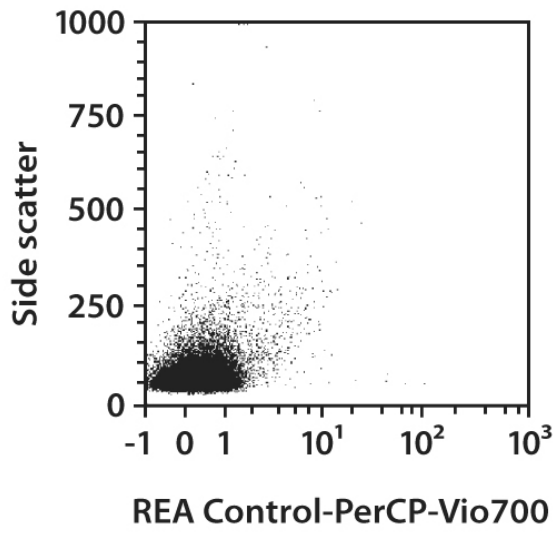

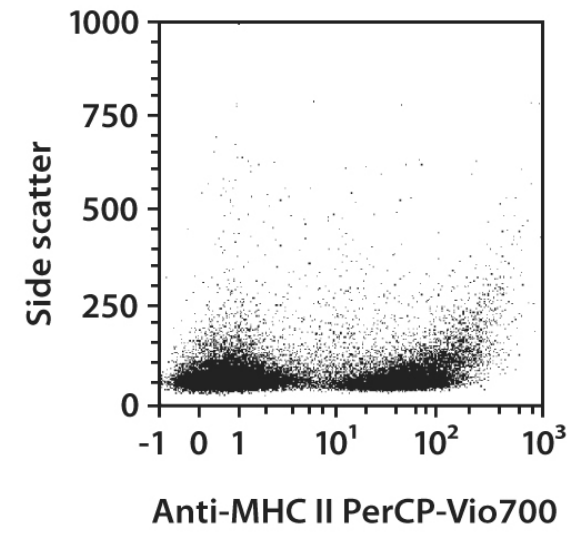

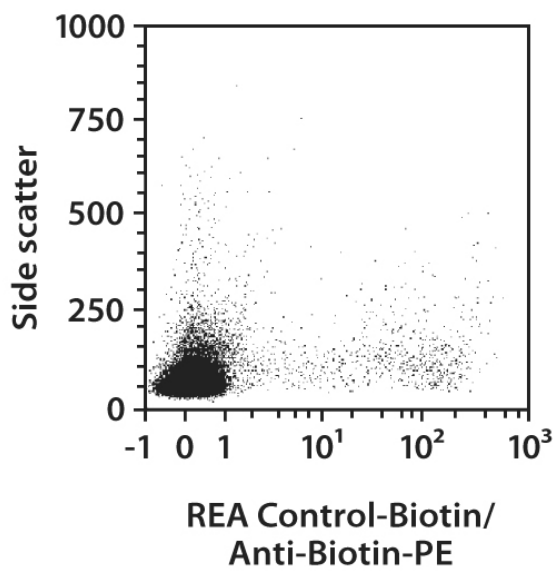

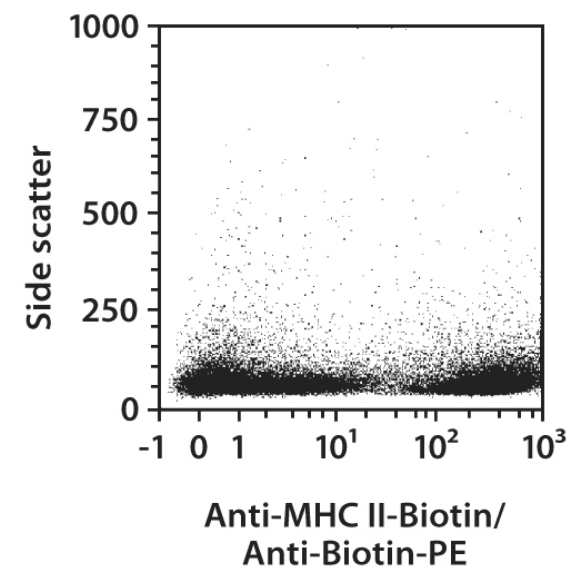

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