CD21/CD35 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.
CD21/CD35-Biotin	30 µg in 200 µL	130-111-728
CD21/CD35-FITC	30 µg in 200 µL	130-111-729
CD21/CD35-FITC	150 µg in 1 mL	130-111-651
CD21/CD35-PE	30 µg in 200 µL	130-111-730
CD21/CD35-PE	150 µg in 1 mL	130-111-652
CD21/CD35-APC	30 µg in 200 µL	130-111-731
CD21/CD35-APC	150 µg in 1 mL	130-111-653
CD21/CD35-VioBlue	30 µg in 200 µL	130-111-736
CD21/CD35-VioBlue	150 µg in 1 mL	130-111-658
CD21/CD35-PE-Vio770	30 µg in 200 µL	130-111-732
CD21/CD35-PE-Vio770	150 µg in 1 mL	130-111-654
CD21/CD35-APC-Vio770	30 µg in 200 µL	130-111-733
CD21/CD35-APC-Vio770	150 µg in 1 mL	130-111-655
CD21/CD35-PerCP-Vio700	30 µg in 200 µL	130-111-734
CD21/CD35-PerCP-Vio700	150 µg in 1 mL	130-111-656
CD21/CD35-VioBright 515	30 µg in 200 µL	130-111-735
CD21/CD35-VioBright 515	150 µg in 1 mL	130-111-657
CD21/CD35-Biotin	150 µg in 1 mL	130-111-650

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	CD21/CD35
Clone	REA800
Isotype	recombinant human IgG1
Isotype control	REA Control antibodies
Alternative names of antigen	CR2, C3dR, C3b/C4b-R, CR1, EBV-R, Immune adherence receptor
Entrez Gene ID	12902
Molecular mass of antigen [kDa]	112

Distribution of antigen	B cells, basophils, dendritic cells, eosinophils, granulocytes, lymphocytes, macrophages, monocytes, neutrophils, NK cells, platelets, red blood cells, T 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 REA800 recognizes an epitope shared by mouse CD21 and CD35, also known as CR2 and CR1. CD21 and CD35 are alternatively spliced transcripts from the Cr2 gene, which produce cell-surface proteins of 145 and 190 kDa, respectively. CD21 and CD35 are expressed on the majority of peripheral B lymphocytes, on the majority of resident peritoneal macrophages, on mast cells, activated granulocytes, and follicular dendritic cells. CD21 forms part of a signal transduction complex with CD19 and CD81, which are associated with the antigen receptor on B lymphocytes. Additional information: Clone REA800 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.

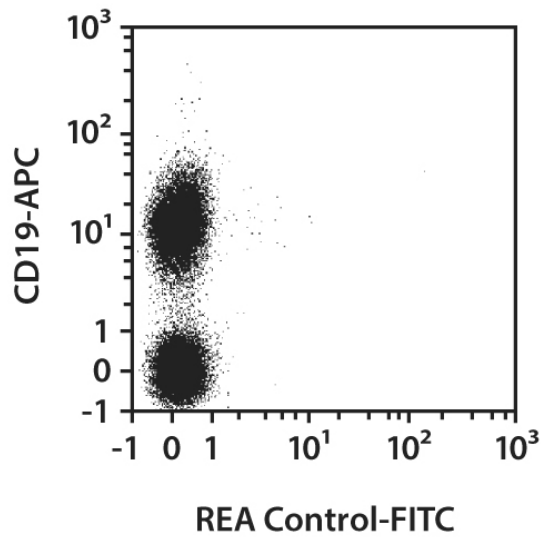
Protocol for cell surface staining

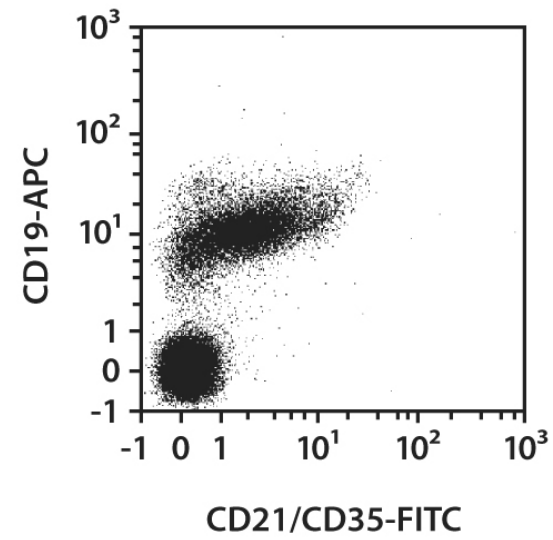
- The recommended antibody dilution for labeling of cells and subsequent analysis by flow cytometry is 1:50 for up to 10^6 cells/100 µL.
- Volumes given below are for up to 10^6 nucleated cells. When working with fewer than 10^6 cells, use the same volumes as indicated. When working with higher cell 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 from C57BL/6 mice were stained with CD21/CD35 antibodies or with the corresponding REA Control antibodies (left image) as well as with CD19 antibodies. Flow cytometry was performed using 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.


CD19-APC
REA Control-FITC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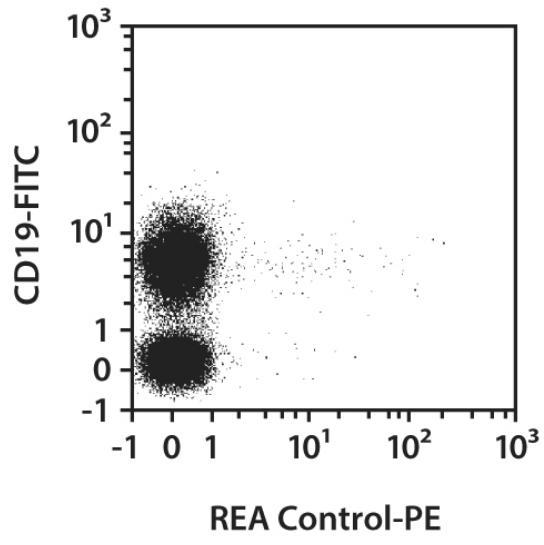
CD21/CD35-FITC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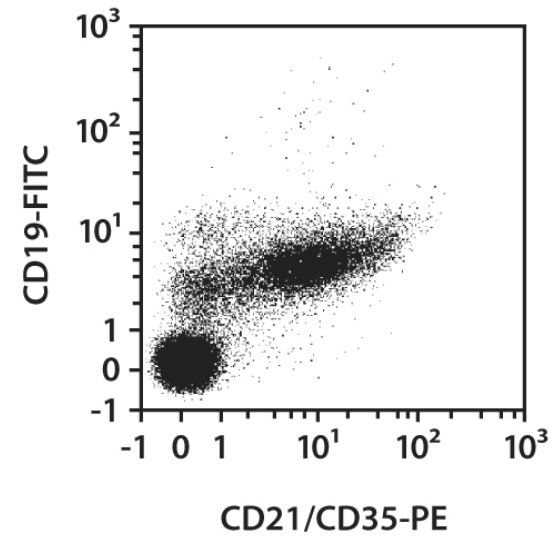
REA Control-PE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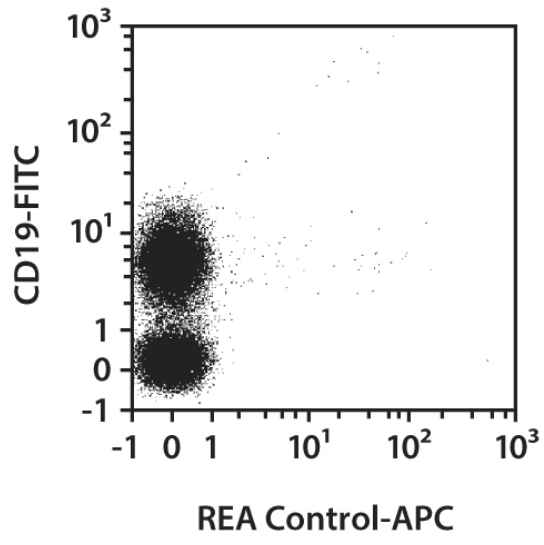
CD21/CD35-PE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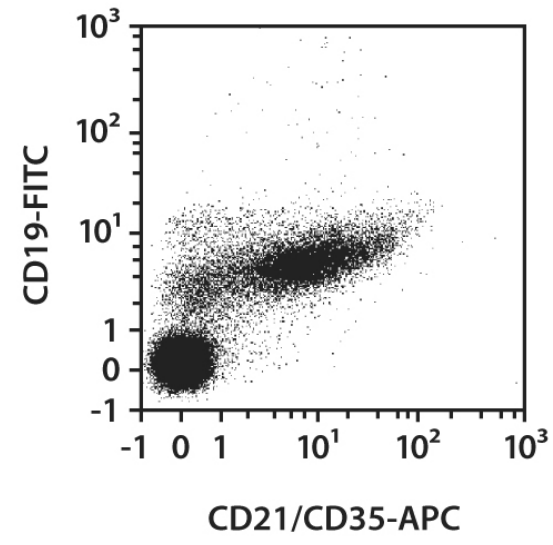
REA Control-APC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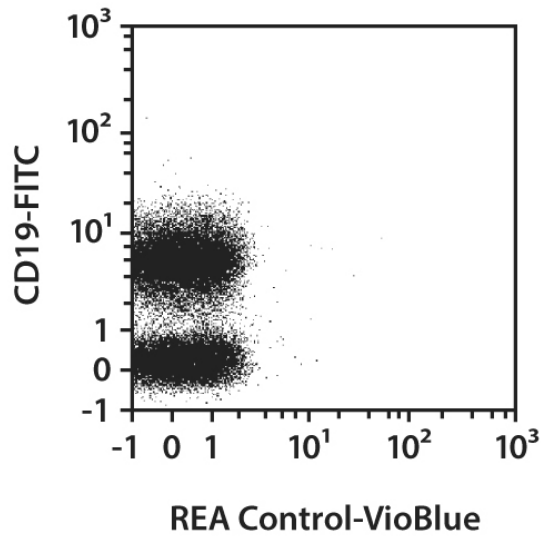
CD21/CD35-APC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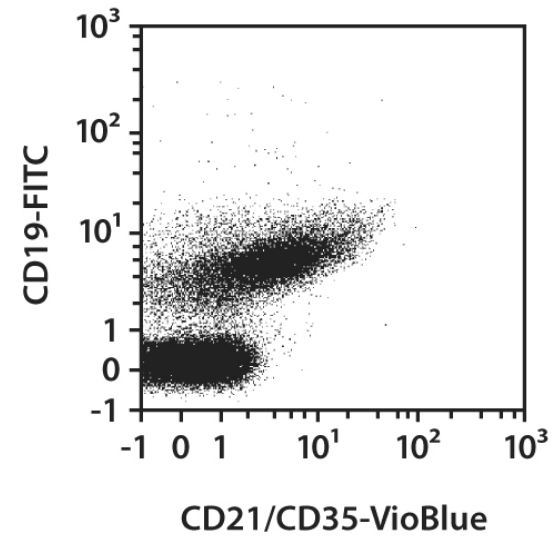
REA Control-VioBlue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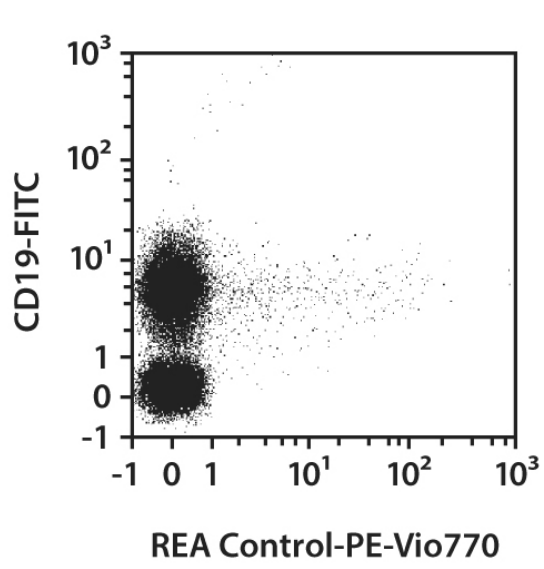
CD21/CD35-VioBlue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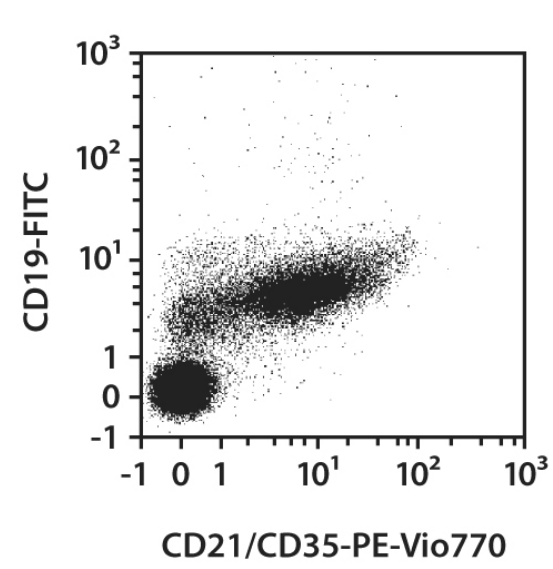
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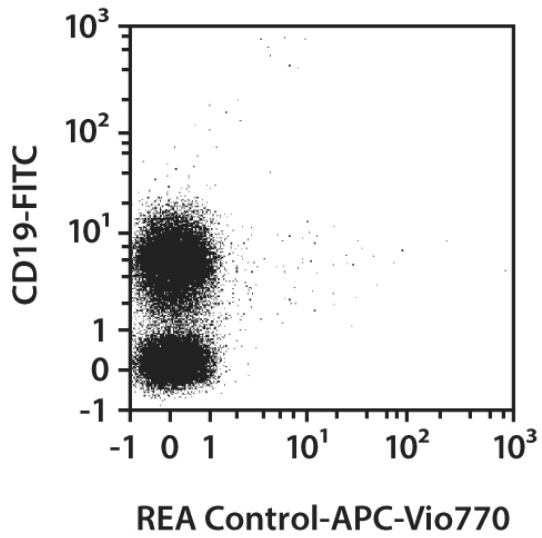
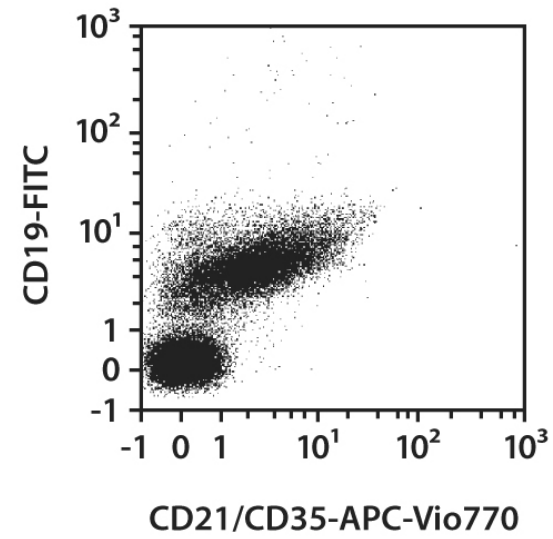
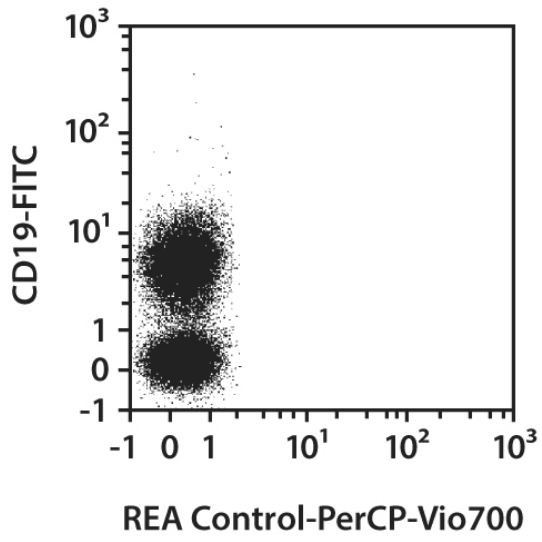
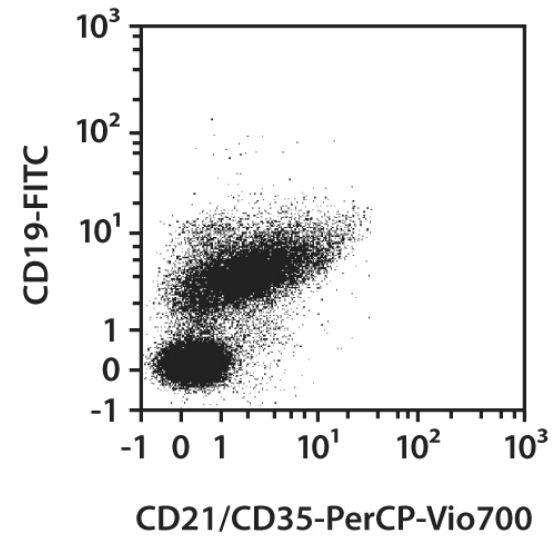
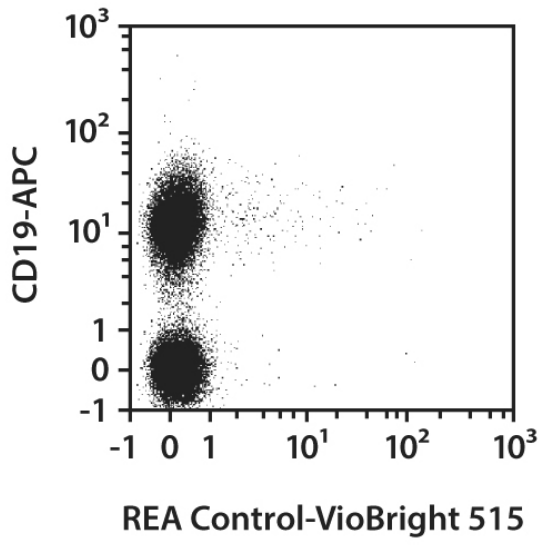
CD21/CD35-PE-Vio770

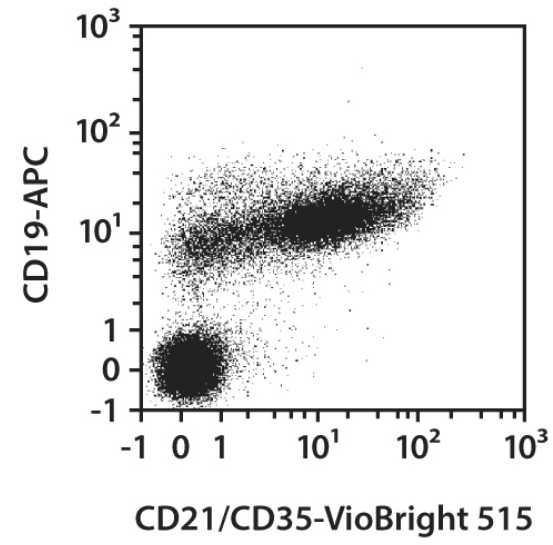


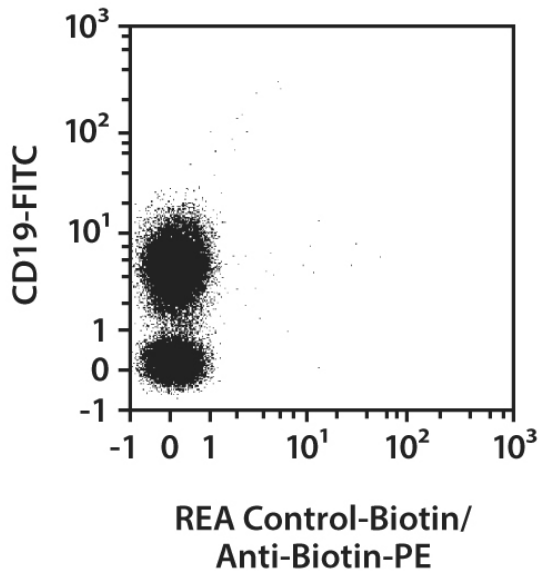


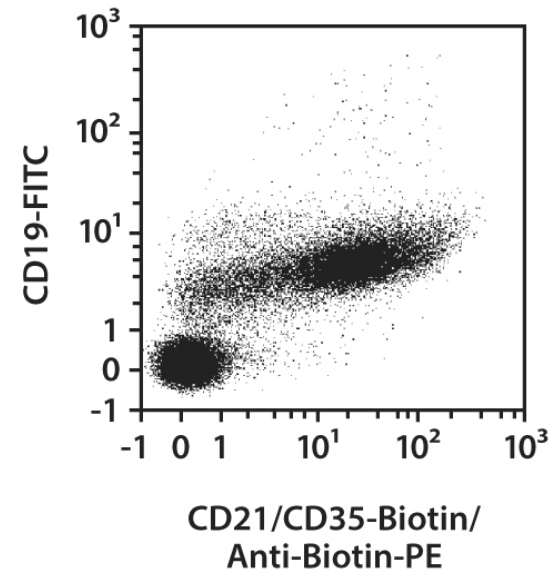












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