

CD102 (ICAM-2) antibodies, mouse

For research use only

30 µg equal 100 tests, 150 µg equal 500 tests. One test corresponds to labeling of 10⁶ cells.

Product	Content	Order no.
CD102 (ICAM-2)-Biotin	30 µg in 200 µL	130-112-028
CD102 (ICAM-2)-PE	30 µg in 200 µL	130-112-029
CD102 (ICAM-2)-PE	150 µg in 1 mL	130-111-877
CD102 (ICAM-2)-APC	30 µg in 200 µL	130-112-030
CD102 (ICAM-2)-APC	150 µg in 1 mL	130-111-878
CD102 (ICAM-2)-PE-Vio770	30 µg in 200 µL	130-112-031
CD102 (ICAM-2)-PE-Vio770	150 µg in 1 mL	130-111-879
CD102 (ICAM-2)-Biotin	2x150 µg in 1 mL	130-111-876

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	CD102 (ICAM-2)
Clone	REA745
Isotype	recombinant human IgG1
Isotype control	REA Control antibodies
Alternative names of antigen	ICAM-2, ICAM2
Entrez Gene ID	15896
Molecular mass of antigen [kDa]	29
Distribution of antigen	endothelial cells, leukocytes, lung, NK cells
Product format	Reagents are supplied in buffer containing stabilizer and 0.05% sodium azide.
Fixation	Cells should be stained prior to fixation, if formaldehyde is used as a fixative.
Storage	Store protected from light at 2-8 °C. Do not freeze.

Clone REA745 recognizes the mouse CD102 antigen, also known as intercellular adhesion molecule 2 (ICAM-2). CD102 is a type I transmembrane glycoprotein belonging to the ICAM proteins of the Ig superfamily. ICAM proteins are ligands for the leukocyte adhesion protein LFA-1. CD102 is found in endothelial cells and leukocytes and is expressed in high level in lung. CD102 plays a role in adhesive interactions, which are important for antigen-specific immune response, in NK-cell mediated clearance, and lymphocyte recirculation. Furthermore, CD102 is involved in other cellular interactions which are important for immune response and surveillance. Additional information: Clone REA745 displays negligible binding to Fc receptors.

Reagent requirements

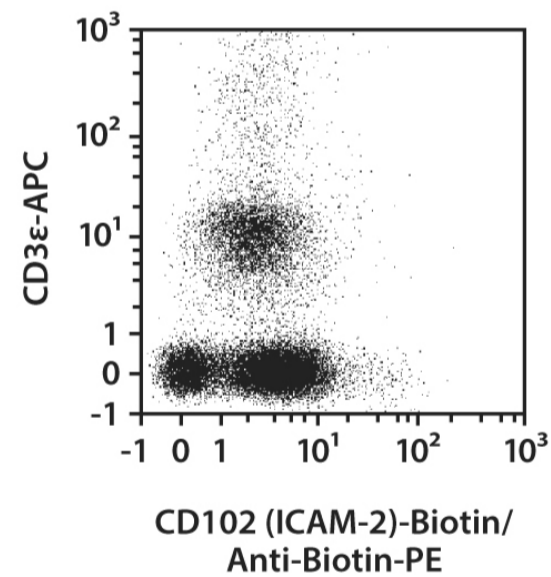
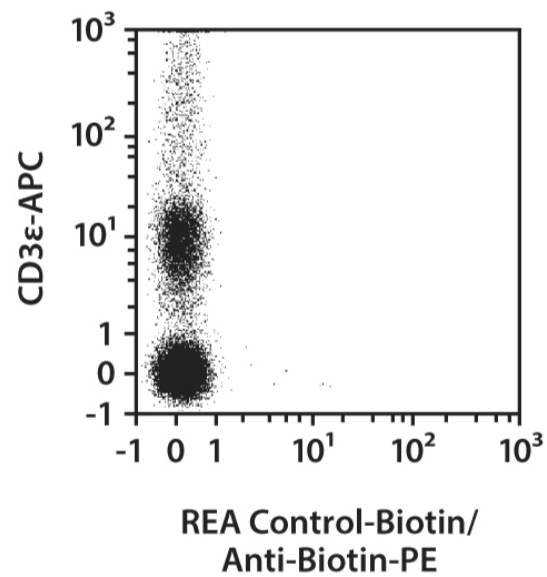
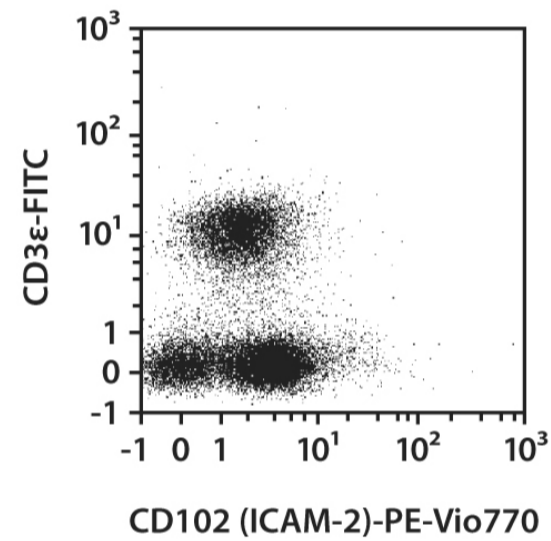
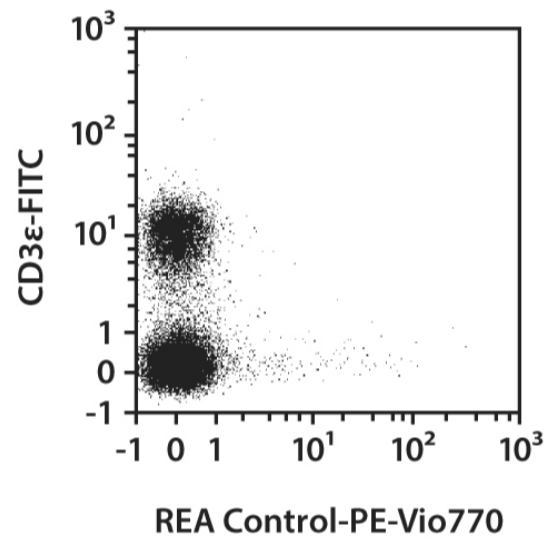
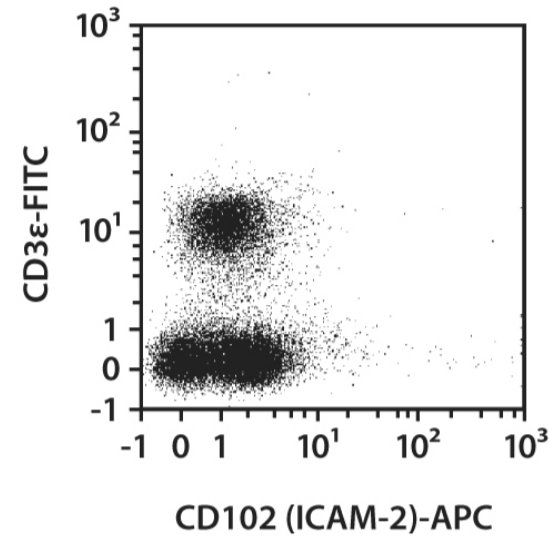
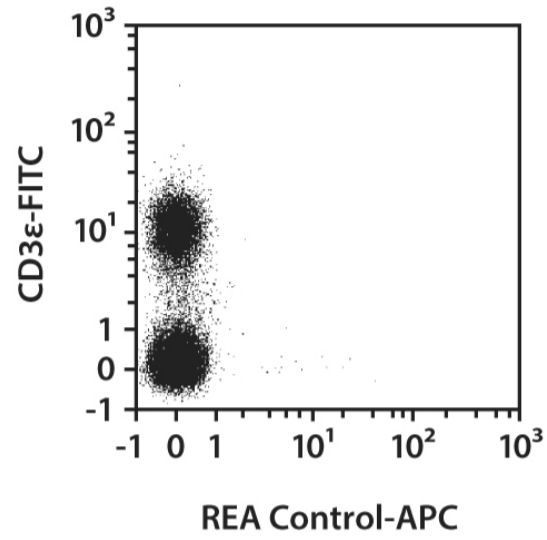
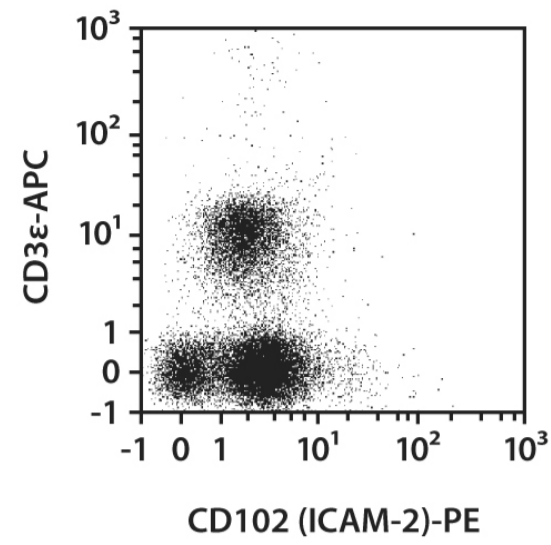
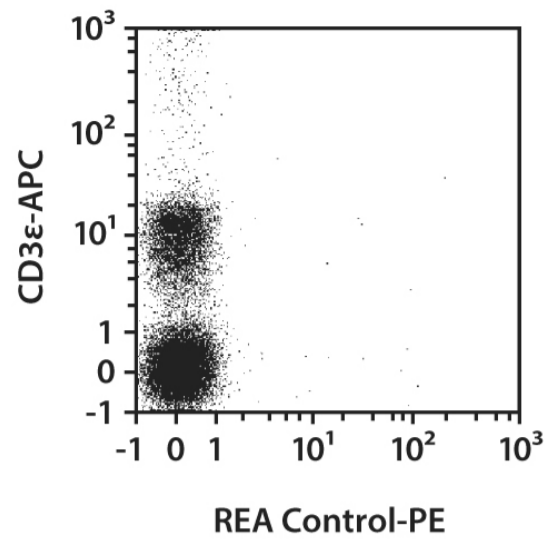
- Buffer: Prepare a solution containing phosphate-buffered saline (PBS), pH 7.2, 0.5% bovine serum albumin (BSA), and 2 mM EDTA by diluting MACS[®] BSA Stock Solution (# 130-091-376) 1:20 with autoMACS[®] Rinsing Solution (# 130-091-222). Keep buffer cold (2–8 °C).
Note: EDTA can be replaced by other supplements such as anticoagulant citrate dextrose formula-A (ACD-A) or citrate phosphate dextrose (CPD). Buffers or media containing Ca²⁺ or Mg²⁺ 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 10⁶ cells/100 µL.
 - Volumes given below are for up to 10⁶ nucleated cells. When working with fewer than 10⁶ 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 10⁶ 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 BALB/c mice were stained with CD102 (ICAM-2) antibodies or with the corresponding REA Control antibodies (left image) as well as with CD3ε 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.



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