

# **CD24** antibodies, mouse

## For research use only

30  $\mu$ g equal 100 tests, 150  $\mu$ g equal 500 tests. One test corresponds to labeling of 10<sup> $\circ$ </sup> cells.

Product	Content	Order no.
CD24-VioBlue	30 μg in 200 μL	130-110-831
CD24-FITC	30 μg in 200 μL	130-110-825
CD24-FITC	150 µg in 1 mL	130-110-687
CD24-PE	30 μg in 200 μL	130-110-826
CD24-PE	150 µg in 1 mL	130-110-688
CD24-APC	30 μg in 200 μL	130-110-827
CD24-APC	150 µg in 1 mL	130-110-689
CD24-VioBlue	150 µg in 1 mL	130-110-693
CD24-VioGreen	30 μg in 200 μL	130-110-832
CD24-VioGreen	150 µg in 1 mL	130-110-694
CD24-PE-Vio770	30 μg in 200 μL	130-110-828
CD24-PE-Vio770	150 µg in 1 mL	130-110-690
CD24-APC-Vio770	30 μg in 200 μL	130-110-829
CD24-APC-Vio770	150 µg in 1 mL	130-110-691
CD24-PerCP-Vio700	30 μg in 200 μL	130-110-830
CD24-PerCP-Vio700	150 µg in 1 mL	130-110-692
CD24-Biotin	30 μg in 200 μL	130-110-824
CD24-Biotin	150 µg in 1 mL	130-110-686

## 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	CD24
Clone	REA743
Isotype	recombinant human IgG1
Isotype control	<b>REA</b> Control antibodies
Alternative names of antigen	CD24A, HSA, Ly-52, Nectadrin
Entrez Gene ID	12484
Molecular mass of antigen [kDa]	3

Distribution of antigen	B cells, T cells, thymocytes, red blood cells, myeloid 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 REA743 recognizes mouse CD24, a glycosyl phosphatidylinositol-anchored cell adhesion molecule also known as HSA (heat-stable antigen), which is a marker of hematopoietic differentiation in B and T cell lineages. It is also expressed by thymocytes, erythrocytes, and myeloid lineage cells. By controlling the proliferation and differentiation balance between transit-amplifying and committed differentiated cells, CD24 regulates cell differentiation. Additional information: Clone REA743 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<sup>®</sup> BSA Stock Solution (# 130-091-376) 1:20 with autoMACS<sup>®</sup> 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**

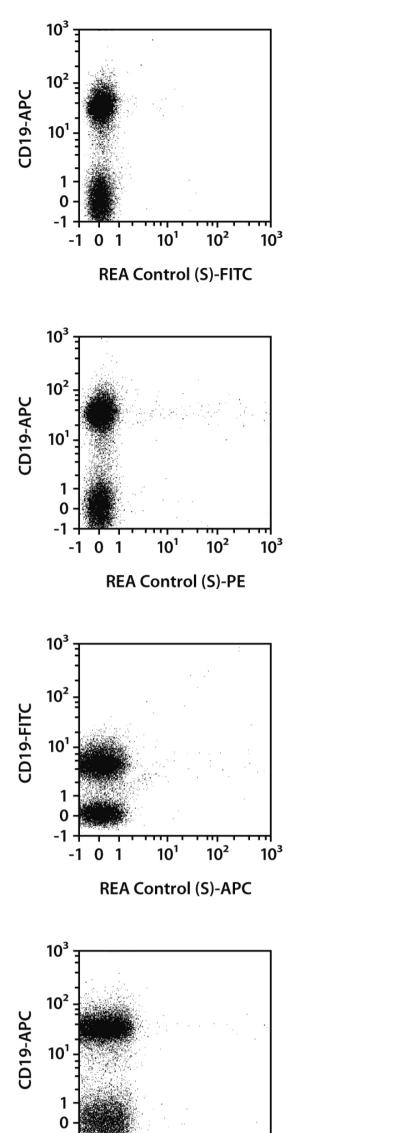
- The recommended antibody dilution for labeling of cells and subsequent analysis by flow cytometry is 1:50 for up to  $10^{\circ}$  cells/100 µL.
- Volumes given below are for up to 10<sup>°</sup> nucleated cells. When working with fewer than 10<sup>°</sup> cells, use the same volumes as indicated. 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  $10^{\circ}$  nucleated cells per 98 µL of buffer.
- 4. Add 2  $\mu L$  of the antibody.
- 5. Mix well and incubate for 10 minutes in the dark in the refrigerator (2–8  $^{\circ}$ C).

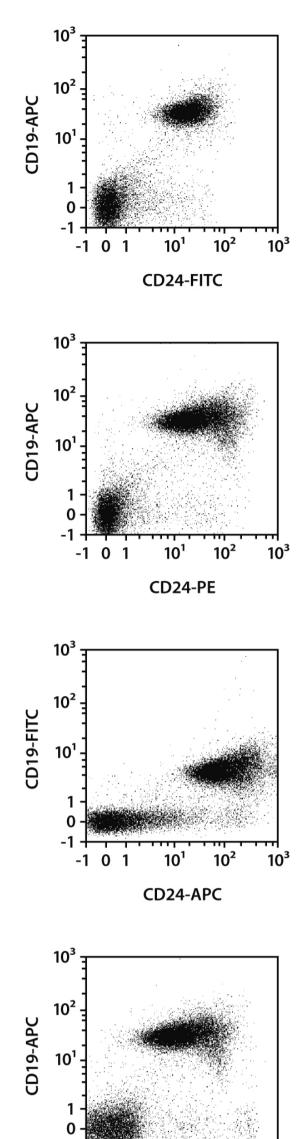
Note: Higher temperatures and/or longer incubation times may lead to non-specific cell labeling. Working on ice requires

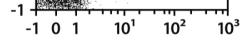
- increased incubation times.
- 6. Wash cells by adding 1-2 mL of buffer and centrifuge at  $300 \times g$  for 10 minutes. Aspirate supernatant completely.
- 7. (Optional) If biotinylated antibody was used, resuspend the cell pellet in buffer and stain with fluorochrome-conjugated antibiotin antibody 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**

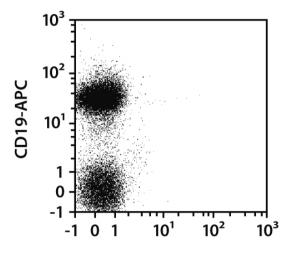
Splenocytes from C57BL/6 mice were stained with CD24 antibodies or with the corresponding REA Control antibodies (left image) as well as with CD19 antibodies. CD45.2 cells were pre-gated for the analysis. Flow cytometry was performed using the MACSQuant<sub>®</sub>Analyzer. Cell debris and dead cells 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.



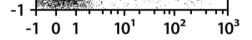




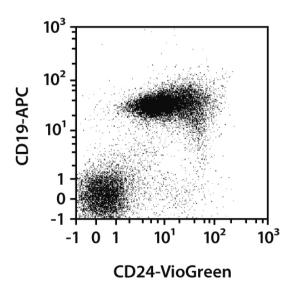
**REA Control (S)-VioBlue** 

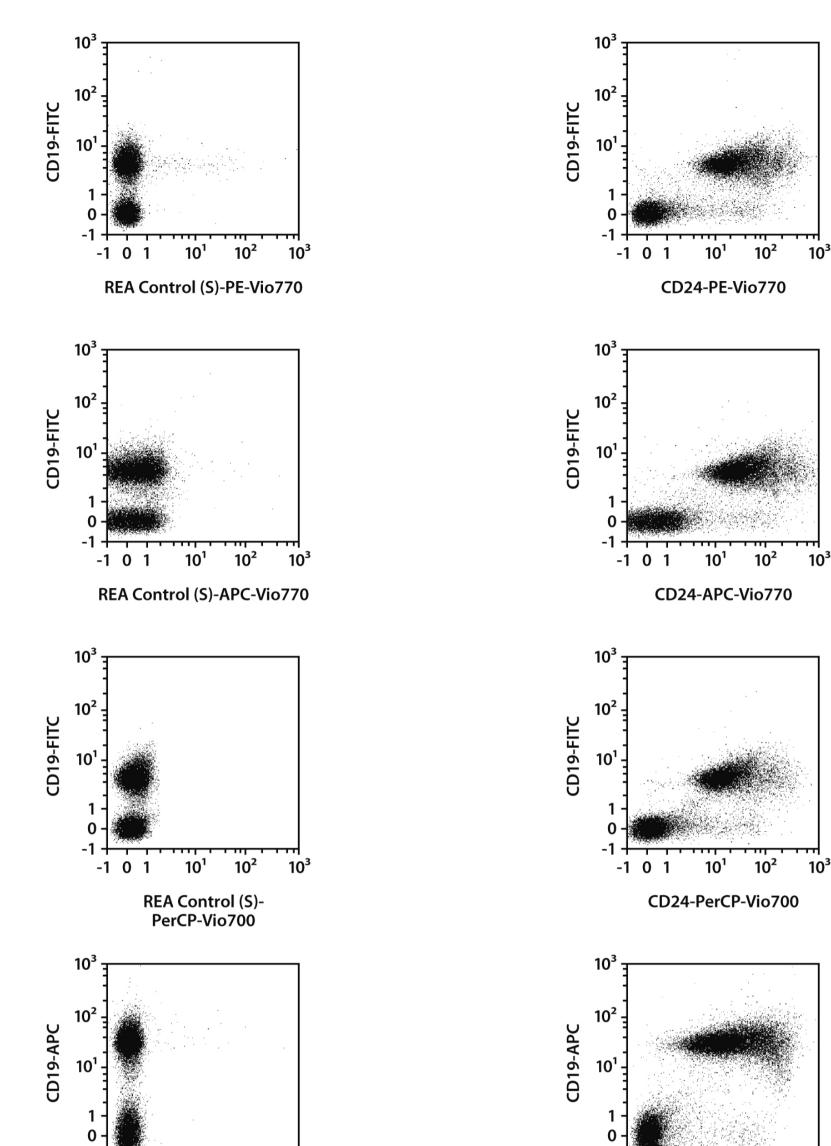


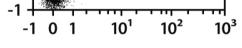
**REA Control (S)-VioGreen** 



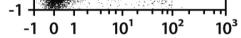
CD24-VioBlue







REA Control (S)-Biotin/ Anti-Biotin-PE



CD24-Biotin/Anti-Biotin-PE

#### Warranty

The products sold hereunder are warranted only to be free from defects in workmanship and material at the time of delivery to the customer. Miltenyi Biotec GmbH makes no warranty or representation, either expressed or implied, with respect to the fitness of a product for a particular purpose. There are no warranties, expressed or implied, which extend beyond the technical specifications of the products. Miltenyi Biotec GmbH's liability is limited to either replacement of the products or refund of the purchase price. Miltenyi Biotec GmbH is not liable for any property damage, personal injury or economic loss caused by the product.

Miltenyi Biotec GmbH | Friedrich-Ebert-Straße 68 | 51429 Bergisch Gladbach | Germany | Phone +49 2204 8306-0 | Fax +49 2204 85197 |

Data sheet | CD24 antibodies, mouse

macs@miltenyibiotec.de | www.miltenyibiotec.com Miltenyi Biotec provides products and services worldwide. Visit **www.miltenyibiotec.com/local** to find your nearest Miltenyi Biotec contact.

Unless otherwise specifically indicated, Miltenyi Biotec products and services are for research use only and not for therapeutic or diagnostic use. autoMACS, MACS, MACSQuant, Vio, VioBlue, VioBright, and VioGreen are either trademarks or registered trademarks of Miltenyi Biotec GmbH. Copyright © 2016 Miltenyi Biotec GmbH. All rights reserved.