



## **EXCLUSION KIT FOR DENDRITIC CELLS STUDIES**

**CD3FITC+CD19FITC+CD56FITC+CD14FITC**

**Reference: CYT-DENDF**

**Product:** Combination of monoclonal antibodies directed against T-lymphocytes (CD3), B-Lymphocytes (CD19), natural killer (CD56) and monocytes (CD14) all conjugated with FITC. Peripheral blood dendritic cells can be distinguished from other leucocytes by their characteristic lack of staining with this combination.

**Description:** Dendritic cells constitute a heterogeneous group of cells which play a crucial role in the immune system since they represent the most potent professional antigen-presenting cells for the initiation of immune responses. This is related to their widespread localization in all sites of antigen entry, their high expression of immunomodulatory molecules necessary for T cell activation, and their production of cytokines.

In recent years there has been an increasingly high interest on the study of dendritic cells, particularly due to their possible application in immunotherapy. Accordingly, the ability of dendritic cells to stimulate primary T lymphocyte and T cell-dependent immune responses may provide opportunities for therapeutic intervention in bone marrow and solid organ transplantation, as well as in autoimmune diseases. In addition, protocols for clinical immunotherapy programmes, targeted on malignant cell antigens or infectious agents, have been designed to exploit dendritic cells as a natural adjuvant for optimal therapeutic vaccination.

Dendritic cells can be identified in human peripheral blood as the fraction of nucleated cells which do not show reactivity for CD3, CD19, CD56 and CD14 antigens and which at the same time are positive for HLA-DR. At flow cytometry these cells display a typical light scatter pattern, with FSC/SSC intermediate values between lymphocytes and monocytes.

**Isotype:** Mouse IgG2a , IgG1, IgG2b, IgG2a respectively

**Volume / Quantity:** 1 ml / 50 test

**Buffer:** Phosphate buffered saline.

**Preservatives** 0.1% Sodium Azide (NaN<sub>3</sub>)

**Stabilisers:** 0.2% Bovine Serum Albumin (BSA)

**Flow Cytometry:** Add 20 µl of MAB / 100 µl of whole blood. Mix gently and incubate for 10 minutes at room temperature 20° C in dark.

Add 2 ml of Lysing solution QUICKLYSIS in each tube. Mix and cover the tubes with Parafilm, and left them in the dark during 10 minutes at room temperature. It is recommended maintain the tubes in horizontal and shake from time to time during incubation time.

Read in a flow cytometer in the following three hours after their preparation. When the samples are not going to be read immediately after their preparation, it is recommended maintain the samples at 4° C in the dark until their processed.

**Storage Conditions:**

Store at + 4° C. DO NOT FREEZE.

This product is photosensitive and should be protected from lighth.

Reagents are stable for the period shown on the vial label when stored properly.

**Health and Safety Information:**

This product contains sodium azide.

EWG-Nr. 247-852-1.

R22: harmful if swallowed.

S46: If swallowed, seek medical advice immediately and show this container or label.

**References:**

1. Almeida J y col. Haematologica 84: 408-14 (1999)

2. Almeida J y col. Clin Exp Immunol 118: 392-401 (1999)

**Lot Specific data:**

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