BACKGROUND

Over 100 cell surface markers have been identified through the use of monoclonal antibodies. Many of these markers have proven useful in identifying a specific subpopulation of cells within a mixed colony. Accordingly, these molecules have been assigned a “cluster of differentiation” (CD) designation. T lymphocytes displaying the natural killer (NK) cell marker CD57 on their cell surface are distinguishable from other T cell subsets by their granular lymphocyte morphology and their clonal expansion in patients with AIDS and in recipients of bone marrow transplantation. Also referred to as Leu7, CD57-positive cells have also been shown to localize to sites of certain tumors and large numbers of these cells are detected in the synovial fluid from patients suffering from rheumatoid arthritis.

REFERENCES


SOURCE

CD57 (NK-1) is a mouse monoclonal antibody raised against human peripheral blood mononuclear cells.

PRODUCT

Each vial contains 200 μg IgM in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as fluorescein (sc-6261 FITC) or phycoerythrin (sc-6261 PE) conjugates for flow cytometry (100 tests in 2.0 ml).

STORAGE

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

CD57 (NK-1) is recommended for detection of CD57 of human origin by immunofluorescence and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

Positive Controls: human lymph node or CCRF-CEM cells.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Immunofluorescence: use goat anti-mouse IgM-FITC: sc-2082 (dilution range: 1:100-1:400) or goat anti-mouse IgM-TR: sc-2983 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA

CD57 (NK-1) sc-6261. Immunoperoxidase staining of formalin-fixed, paraffin-embedded normal human lymph node at high magnification showing membrane staining.

CD57 (NK-1) PE: sc-6261 PE. FCM analysis of CCRF-CEM cells. Black line histogram represents the isotype control, normal mouse IgM: sc-2870.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.