



B lymphocytes (UCH-B1): sc-53174

BACKGROUND

B lymphocytes are cells that play a large role in the humoral immune response, as opposed to the cell-mediated immune response that is governed by T cells. The principal function of B lymphocytes is to make antibodies against soluble antigens, although they do not produce antibodies until they become fully activated. B lymphocytes have unique receptor proteins (referred to as the B cell receptors (BCRs)) on their surfaces that will bind to one particular antigen. BCRs are composed of membrane-bound immunoglobulin, and allow for the distinction of B lymphocytes from other types of lymphocytes, as well as being the principal proteins involved in B lymphocyte activation. The human body makes millions of different types of B lymphocytes each day that circulate in the blood and lymph nodes. The UCH-B1 antigen (85 kDa) is detected on a sub-population of B lymphocytes, probably related to the stage of activation or maturation. UCH-B1 may be useful for differential diagnosis of B cell leukaemias and as a marker of prolymphocytic leukaemia.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CD83 (human) mapping to 6p23; Cd83 (mouse) mapping to 13 A4-5.

SOURCE

B lymphocytes (UCH-B1) is a mouse monoclonal antibody raised against prolymphocytic leukaemia B cells of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

B lymphocytes (UCH-B1) is recommended for detection of B lymphocytes of human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

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.