SANTA CRUZ BIOTECHNOLOGY, INC.

B lymphocytes (I73-9): sc-69674

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.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CD83 (human) mapping to 6p23.

SOURCE

B lymphocytes (I73-9) is a mouse monoclonal antibody raised against Burkitt's lymphoma cell line Raji of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

B lymphocytes (I73-9) is available conjugated to either phycoerythrin (sc-69674 PE) or fluorescein (sc-69674 FITC), 200 µg/ml, for IF, IHC(P) and FCM.

APPLICATIONS

B lymphocytes (I73-9) is recommended for detection of HLA-DR10 and B cell lymphomas of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10^6 cells).

Molecular Weight of B lymphocytes: 36 kDa.

Positive Controls: Daudi cell lysate: sc-2415 or L428 cell lysate: sc-24728.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

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 for detailed protocols and support products.