



T Cell Marker (PF8J-14C): sc-66011

BACKGROUND

T cells, along with B cells and NK cells, belong to the group of white blood cells known as lymphocytes. They play a central role in cell-mediated immunity and are distinguished by their T cell receptor (TCR), a special receptor on their cell surface. T cells originate in the bone marrow, mature in the thymus and travel in the blood to other lymphoid tissues, such as the tonsils, spleen and lymph nodes. CD2, CD3, CD5 and CD7 are pan T cell markers, as they are present on most normal mature T cells. Of the pan T cell markers, CD2 and CD3 are the most specific for T cells. CD5 is strongly associated with T cells but is also expressed on a small subset of normal B lymphocytes and in B-chronic lymphocytic leukemia. CD7 may occasionally be present on early myeloid cells, especially in leukemia. In acute infectious mononucleosis, there is downregulation of the pan T cell markers, namely CD7, and in Sezary syndrome, a T cell cutaneous lymphoma, the T cells express CD4 but do not usually express CD7.

REFERENCES

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6. Sempowski, G.D., Lee, D.M., Kaufman, R.E. and Haynes, B.F. 1999. Structure and function of the CD7 molecule. *Crit. Rev. Immunol.* 19: 331-348.
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SOURCE

T Cell Marker (PF8J-14C) is a mouse monoclonal antibody raised against T lymphocytes of feline origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

T Cell Marker (PF8J-14C) is recommended for detection of T lymphocyte mononuclear cells of feline origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

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.