Mo-CD5/CD19
2 Color FCM Reagent: *sc-3981*

BACKGROUND

Mouse CD5/CD19: sc-3981 is a direct immunofluorescence reagent formatted to identify and determine the percentage of mouse T lymphocytes and B lymphocytes in erythrocyte-lysed whole blood, based on cell-surface antigen expression. CD5 is expressed on virtually all T lymphocytes in thymus and peripheral blood and on a subset of B lymphocytes (1). CD5 may be involved in T cell activation, when present (2). CD19 is present on mouse B lymphocytes during all stages of B cell maturation, but is lost on plasma cells (3). The total population of T lymphocytes and B lymphocytes are used to characterize and monitor some forms of immunodeficiency and autoimmune disease (4,5).

Antigen Expression	Cell Type Identified
CD5+	T Lymphocytes
CD19+	B Lymphocytes

STORAGE

Store at 4° C. Do not freeze. Stable for one year from the date of shipment. Protect reagents from prolonged exposure to light.

PRODUCT

Supplied in 1.0 ml of PBS containing 0.1% azide and 0.1% gelatin. Sufficient for 50 tests. This product has been titrated for optimal performance. Recommended use is 20 uL per test (1x10^6 cells). **For research use only. Not for use in diagnostic procedures.**

INSTRUMENT

Mouse CD5/CD19: sc-3981 is recommended for use with either a single or dual laser Flow Cytometer fitted with appropriate acquisition and analysis software, such as the FACSCalibur™ Flow Cytometer fitted with CellQuest™ Software by Becton Dickinson.

The flow cytometer must be equipped with a 488 nm laser and must be capable of detecting light scatter (forward and side) and two-color fluorescence with emission detectable in two ranges: 515-545 nm and 562-607 nm.

Antigen	Clone	Isotype	Label*	Detection Range (nm)
CD5	53-7.3	rat IgG_{2a}	FITC	515-545
CD19	65	rat IgG_{2a}	PE	562-607

*Fluorescent labels include FITC: Fluorescein isothiocyanate; PE: phycoerythrin

ISOTYPE CONTROL

sc-3981 CON (rat IgG_{2a} FITC/rat IgG_{2a} PE) is the isotype matched negative control for this system and is suitable for 50 tests.

REFERENCES

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5. Smolen, J.S., Chused, T.M., Leiserson, W.M., Reeves, J.P., Alling, D., and Steinberg, A.D. 1982. Heterogeneity of immunoregulatory T-cell subsets in systemic lupus erythematosus. Correlation with clinical features. Am. J. Med. 2: 783-790.