

Hu-CD5/CD10/CD19

3 Color FCM Reagent: sc-3928



BACKGROUND

Human CD5/CD10/CD19: sc-3928 is a direct immunofluorescence reagent formatted to identify and determine the percentage of human 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 human 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). CD10 is present on normal and neoplastic cell types, including normal granulocytes (6). CD10 is also present on lymphocytes in some B-lymphoid leukemias (6).

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 (1x10⁶ cells). **For research use only. Not for use in diagnostic procedures.**

INSTRUMENT

Human CD5/CD10/CD19: sc-3928 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 three-color fluorescence with emission detectable in three ranges: 515-545 nm, 562-607 nm and >650 nm, and it must be able to threshold and discriminate using the >650 channel.

Antigen	Clone	Isotype	Label*	Detection Range (nm)
CD5	UCH-T2	IgG ₁	FITC	515-545
CD10	SN5c	IgG ₁	PE	562-607
CD19	SJ25C1	IgG ₁	PE-Cy5	>650

*Fluorescent labels include FITC: Fluorescein isothiocyanate; PE: phycoerythrin; PE-Cy5: phycoerythrin-cyanin 5.

ISOTYPE CONTROL

sc-3928 CON (IgG₁ FITC/IgG₁ PE/IgG₁ PE-Cy5) is the isotype matched negative control for this system and is suitable for 50 tests.

REFERENCES

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