Hu-CD3/CD19
2 Color FCM Reagent: *sc-3952*

BACKGROUND

Human CD3/CD19: sc-3952 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. CD3 identifies T lymphocytes and non-covalently associates with either α/β or γ/δ TCR (1). NK lymphocytes identified as $CD3^-$ and $CD16^+$ and/or $CD56^+$ mediate cytotoxicity against certain tumors and virus infected cells (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).

Antigen Expression	Cell Type Identified
CD3+	Mature T Lymphocytes
CD3- CD19+	Total 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

Human CD3/CD19: sc-3952 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, 562-607 nm.

Antigen	Clone	Isotype	Label*	Detection Range (nm)
CD3	UCH-T1	IgG_1	FITC	515-545
CD19	SJ25C1	IgG_1	PE	562-607

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

ISOTYPE CONTROL

sc-3952 CON (IgG_1 FITC/IgG_1 PE) is the isotype matched negative control for this system and is suitable for 50 tests.

REFERENCES

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U.S. 1.800.457.3801 • 831.457.3800 • fax 831.457.3801 • Europe +800 4573 8000 • 49 (0)6221 4503 0 • fax 49 (0)6221 4503 45 • www.scbt.com
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