

Mo-CD3/CD19

2 Color FCM Reagent: sc-3978



BACKGROUND

Mouse CD3/CD19: sc-3978 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. 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 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 μ L per test (1×10^6 cells). **For research use only. Not for use in diagnostic procedures.**

INSTRUMENT

Mouse CD3/CD19: sc-3978 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) |
|---------|----------|-----------------------|--------|----------------------|
| CD3 | 145-2C11 | Armenian Hamster IgG | FITC | 515-545 |
| CD19 | 65 | rat IgG _{2a} | PE | 562-607 |

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

ISOTYPE CONTROL

sc-3978 CON (Armenian Hamster IgG 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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