

Mo-CD3/CD4

2 Color FCM Reagent: sc-3976



BACKGROUND

Mouse CD3/CD4: sc-3976 is a direct immunofluorescence reagent formatted to identify and determine the percentage of mature T lymphocytes and helper/inducer T 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). CD4 identifies the helper/inducer T lymphocyte subset that is present on normal peripheral blood lymphocytes (2,3). CD4 binds class II MHC molecules (3) and is the primary receptor for HIV (4). CD3+CD8+ and CD3+CD4+ percentages are used to characterize and monitor some forms of immunodeficiency and autoimmune disease (5,6).

| Antigen Expression | Cell Type Identified |
|--------------------|------------------------|
| CD3+ | Mature T Cells |
| CD3+ CD4+ | Helper/Inducer T Cells |

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

INSTRUMENT

Mouse CD3/CD4: sc-3976 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 |
| CD4 | H129.19 | rat IgG _{2a} | PE | 562-607 |

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

ISOTYPE CONTROL

sc-3976 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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