

# Hu-CD4/CD62L

## 2 Color FCM Reagent: sc-3955



### BACKGROUND

Human CD4/CD62L: sc-3955 is a direct immunofluorescence reagent formatted to identify and determine the percentage of mature helper/inducer and suppressor/cytotoxic T cells in erythrocyte-lysed whole blood, based on cell-surface antigen expression. In immune deficiency states, helper T cells decline and suppressor T cells increase. CD4 identifies helper/inducer T lymphocytes and binds class II MHC molecules (1). CD4 is also the primary receptor for HIV (2). As HIV progresses, infected individuals exhibit a steady decrease in helper/inducer lymphocytes (3,4). CD62L is present on a subset of normal peripheral blood B lymphocytes and on most circulating T cells (5). CD62L also identifies regulatory subpopulations of T lymphocytes in both the CD4+ and CD8+ subsets (6). CD4+CD62L- lymphocytes mediate the majority of helper functions involved in B-lymphocyte differentiation into plaque-forming cells, whereas the suppressor inducer functional subpopulation is included in the CD4+CD62L+ compartment (6).

Antigen Expression	Cell Type Identified
CD4+	Helper/Inducer T Cells
CD4+ CD62L+	Suppressor Inducer Function
CD4+ CD62L-	Helper Function

### 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<sup>6</sup> cells). **For research use only. Not for use in diagnostic procedures.**

### INSTRUMENT

Human CD4/CD62L: sc-3955 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)
CD4	MT310	IgG <sub>1</sub>	FITC	515-545
CD62L	DREG56	IgG <sub>1</sub>	PE	562-607

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

### ISOTYPE CONTROL

sc-3955 CON (IgG<sub>1</sub> FITC/IgG<sub>1</sub> PE) is the isotype matched negative control for this system and is suitable for 50 tests.

### REFERENCES

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