

Hu-CD57/CD8

2 Color FCM Reagent: sc-3960



BACKGROUND

Human CD57/CD8: sc-3960 is a direct immunofluorescence reagent formatted to identify and determine the percentage of activated suppressor/cytotoxic T lymphocytes in erythrocyte-lysed whole blood, based on cell-surface antigen expression. CD8 identifies suppressor/cytotoxic T lymphocytes (1,2) and binds class I MHC molecules, resulting in enhanced activation of resting T lymphocytes (3). CD57 is a membrane antigen expressed on human natural killer cells and some other lymphoid cells (4). CD57 is also present on approximately 15-20% of normal peripheral blood mononuclear cells as well as on subsets of NK lymphocytes and T Lymphocytes (5). In the presence of decreased levels of CD4+ cells, elevation of the CD8+CD57+ subpopulation has been associated with a combination of pre-acquired immune deficiency syndrome (AIDS) symptoms known as AIDS-related complex (ARC) (6).

Antigen Expression	Cell Type Identified
CD8+	Suppressor/Cytotoxic T Cells
CD8+ CD57+	ARC

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 CD57/CD8: sc-3960 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)
CD57	NK-1	IgM	FITC	515-545
CD8	HIT8a	IgG ₁	PE	562-607

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

ISOTYPE CONTROL

sc-3960 CON (IgM FITC/IgG₁ PE) is the isotype matched negative control for this system and is suitable for 50 tests.

REFERENCES

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5. Lanier, L.L., Le, A.M., Phillips, J.H., Warner, N.L., and Babcock, G.F. 1983. Subpopulations of human natural killer cells defined by expression of the Leu-7 (HNK-1) and Leu-11 (NK-15) antigens. *J. Immunol.* **131**: 1789-1796.
6. Lewis, D.E., Puck, J.M., Babcock, G.F., and Rich, R.R. 1985. Disproportionate expansion of a minor T cell subset in patients with lymphadenopathy syndrome and acquired immunodeficiency syndrome. *J. Infect. Dis.* **151**: 555-559.