

Hu-CD15/CD34

2 Color FCM Reagent: sc-3937



BACKGROUND

Human CD15/CD34: sc-3937 is a direct immunofluorescence reagent formatted to identify and determine the percentage of myelomonocytic cells and myeloid progenitor cells in erythrocyte-lysed whole blood, based on cell-surface antigen expression. CD15 is expressed on more than 95% of mature peripheral blood neutrophils, eosinophils and on a small percentage of circulating monocytes (1). CD15 is the myeloid type of alpha-3-fucosyltransferase (also designated FUT4) (2), which is distinct from the plasma type of alpha-3-fucosyltransferase (designated FUT5) (3) in that only CD15 creates the 3-fucosyllactosamine epitope on polymorphonuclear cells and monocytes (2) CD34 is a marker for myeloid progenitor cells (4). CD34 expression is highest on early hematopoietic progenitor cells, decreases as cells mature and is absent on fully differentiated hematopoietic cells (5). The CD15+CD34+ phenotype is aberrant in acute myeloid leukemia patients, but is rare in normal bone marrow (6). Changes in the CD15 CD34 phenotype may be useful in studying normal and malignant myeloid differentiation. (7).

Antigen Expression	Cell Type Identified
CD15+	Myelomonocytic Cells
CD34+	Myeloid Progenitor 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 uL per test (1x10⁶ cells). **For research use only. Not for use in diagnostic procedures.**

INSTRUMENT

Human CD15/CD34: sc-3937 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.

ISOTYPE CONTROL

sc-3937 CON (IgM FITC/IgG₁ PE) is the isotype matched negative control for this system and is suitable for 50 tests.

Antigen	Clone	Isotype	Label*	Detection Range (nm)
CD15	C3D-1	IgM	FITC	515-545
CD34	ICO115	IgG ₁	PE	562-607

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

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