Hu-HLA-DR/CD13
2 Color FCM Reagent: *sc-3939*

BACKGROUND

Human HLA-DR/CD13: sc-3939 is a direct immunofluorescence reagent formatted to identify and determine the percentage of myelomonocytic cells and hematopoietic progenitor cells in erythrocyte-lysed whole blood, based on cell-surface antigen expression. HLA-DR is a class II MHC antigen that is expressed on B lymphocytes, monocytes, macrophages, activated T lymphocytes, activated NK lymphocytes and on human hematopoietic progenitor cells (1-3). HLA-DR is also present on thymic epithelium, B-lymphocyte-dependent areas of spleen and lymph node and B-cell lymphomas (4). CD13 is normally expressed on peripheral blood neutrophils, eosinophils, basophils and monocytes, but not on normal lymphoid cells, erythrocytes and platelets (5). CD13 is also expressed in the most cases of acute myeloid leukemia (6) and can be aberrantly expressed in cases of acute lymphoblastic leukemia (7).

Antigen Expression	Cell Type Identified
HLA-DR+	Hematopoietic Precursors
CD13+	Myelomonocytic 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 ($1x10^6$ cells). **For research use only. Not for use in diagnostic procedures.**

INSTRUMENT

Human HLA-DR/CD13: sc-3939 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)
HLA-DR	L243	IgG_{2a}	FITC	515-545
CD13	SJ1D1	IgG_1	PE	562-607

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

ISOTYPE CONTROL

sc-3939 CON (IgG_{2a} FITC/IgG_1 PE) is the isotype matched negative control for this system and is suitable for 50 tests.

REFERENCES

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January 2002