

QIFIKIT®

FOR QUANTITATIVE ANALYSIS OF
INDIRECT IMMUNOFLUORESCENCE
STAINING IN FLOW CYTOMETRY



Dako

Agilent Reagent Solutions



Intended Use of QIFIKIT®*

QIFIKIT® is intended for the determination of antibody-binding and antigen density per cell using flow cytometry and monoclonal antibodies. The kit contains sufficient reagents for 10 calibrations including set-up beads, calibration beads, and FITC conjugate. The measurement range is 1,000 to 1,000,000 monoclonal antibody molecules or antigenic sites per cell.

The kit is well suited for use in indirect immunofluorescence with any unconjugated mouse monoclonal antibody of IgG isotype. For evaluation of antigen density the antibody must be used at saturation.

Standardization

- Gives absolute rather than relative values.
- Helps create "normal" antigen density values to be used as a reference value.
- Enables comparisons between different laboratories and different periods of time.
- Makes precise definitions of "positive" versus "negative" and "bright" versus "dim" cells possible.

Flexibility

- Standards provide flexibility in instrument set-up and/or calibration.
- Adapted to indirect immunofluorescence staining protocols.
- Applicable to cell lines, isolated cells and whole blood samples.
- Useful for instrument expressing MFI in linear values and in channel numbers.

* Registered trademark of BIOCYTEX



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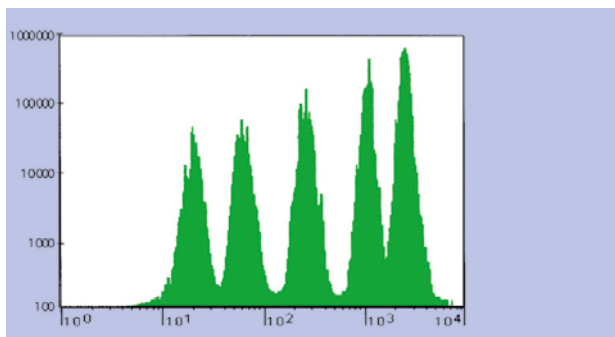


Figure 1 Calibration Beads are used for construction of the calibration curve.

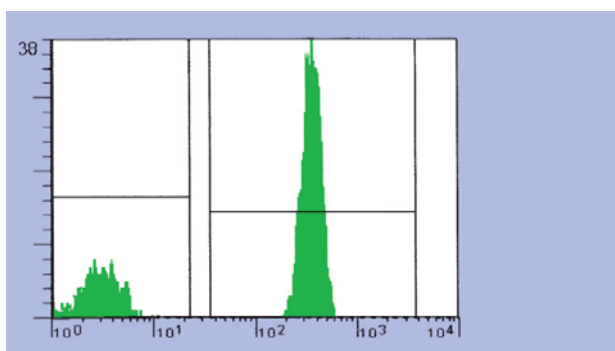


Figure 2 Quantitation of the CD4 antigen density on lymphocytes from whole blood samples using the QIFIKIT®. By interpolation on the calibration curve the CD4 antigen density is found to be 57,000 sites per cell.

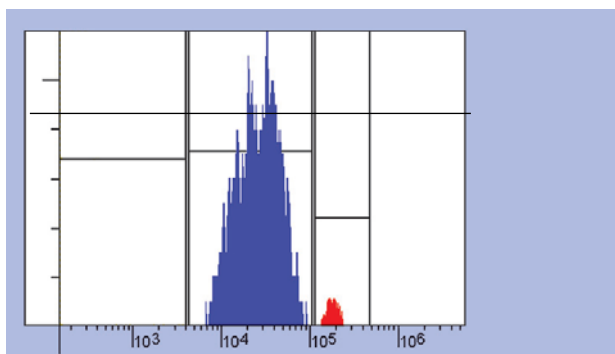


Figure 3 Determination of CD45 density on both blast cells and residual normal lymphocytes from a pre-B-ALL patient using the QIFIKIT® and labeling with Anti-CD45 Leucocyte Common Antigen, clone T29/33. The histogram shows a CD45 density of 200,000 sites per cell for the lymphocytes, which is in agreement with previous data (1) and 30,000 sites per cell for the leukemic population.

Kit Contents

- Vial 1** Set-Up Beads
Two populations of beads. Blank beads (A) and beads with a high number of Mab molecules.
1 mL
- Vial 2** Calibration Beads
Five populations of beads (B, C, D, E, and F) bearing different numbers of Mab molecules.
1 mL
- Vial 3** FITC Conjugate
F(ab')₂ Fragment of FITC-Conjugated Goat Anti-Mouse Immunoglobulins (affinity-isolated).
0.2 mL

Ordering Information

Product	Size	Code
QIFIKIT®	10 calibrations	K0078

Reference

1. Lavabre-Bertrand T, Duberry C, Brunet C, Poncelet P, Exbrayat C, Bourquard P, et al. Quantification of CD24 and CD45 antigens in parallel allows a precise determination of B-cell maturation stages: relevance for the study of B-cell neoplasias. *Leukemia* 1994;8:402-8.



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