

## DATA SHEET

# LYMPHOCYTE SUBSET ASSAYS

## CONTENTS

- ① Microfluidic cartridge with lyse or non-lyse buffer
- ② Dried reagents in tube

## STORAGE

Dry cool place protected from light

## DESCRIPTION

MARKER	FLUOROPHORE	CLONE
CD45	PE/Cyanine7	H130
CD3	PE/Cyanine5	UCHT-1
CD14	PE/Dazzle™ 594	M5E2
CD19	PE	H1B19
CD56	AlexaFluor® 488	HCD56
CD16 (optional)	AlexaFluor® 488	B73.1
Viability dye	DiYO-3	N/A
Count beads	N/A	N/A

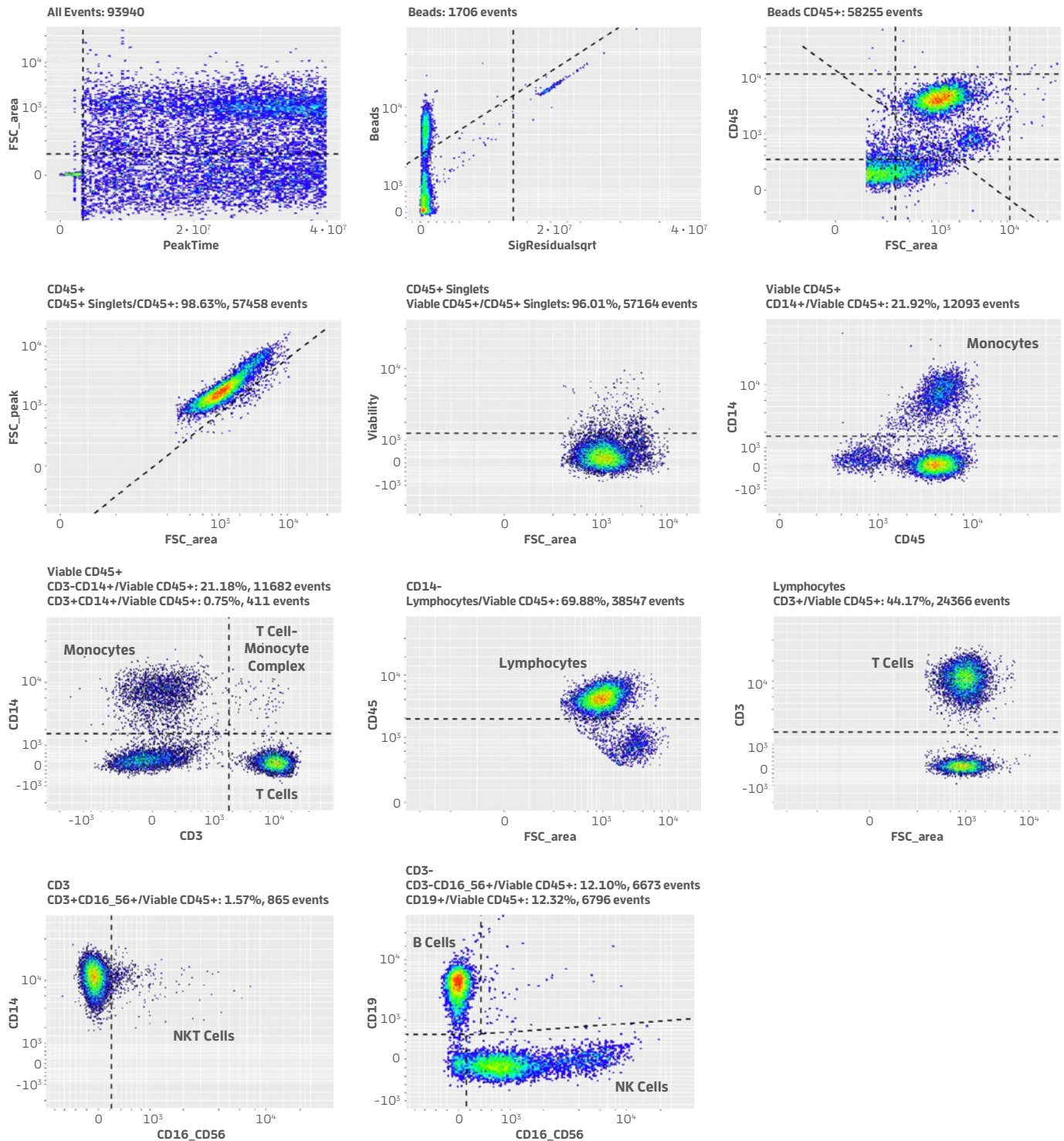
The Accellix Platform automates your entire GMP cell phenotyping process from sample preparation to data acquisition and analysis, to generate rapid results directly in the manufacturing suite. Central to our enabling technology are standard and custom assays. These assays enable sample preparation in a stable, single-use microfluidic cartridge using unitized and dried reagents that are stable at ambient temperatures. The dried reagent also has control beads, enabling cell counting and in-run QC for every assay. Each assay incorporates an Accellix cartridge with a unique QR code, simplifying the workflow and reducing the chances for human error.

## INTENDED USE

The Lymphocyte Subset assays are used for the enumeration (frequencies and counts) of various lymphocyte subsets including viable CD45+ leukocytes, CD3+ T cells, CD14+ monocytes, CD19+ B cells, and CD3-CD56/CD16+ Natural Killer (NK) cells. The TBNK assays do not include CD16 antibodies, while the TBNK-I6 assays include both CD56 and CD16 antibodies conjugated to AF488. The lyse (L) assays may be used for staining apheresis, whole blood, and other samples that require differential RBC (red blood cells) lysis, while the non-lyse version may be used for staining purified white blood cells. The assays have been formulated to process samples with cell concentrations ranging between 1-50 million cells/mL. A detailed protocol on how to run the Accellix assays can be found in the Accellix Assay Kit Instructions for Use.

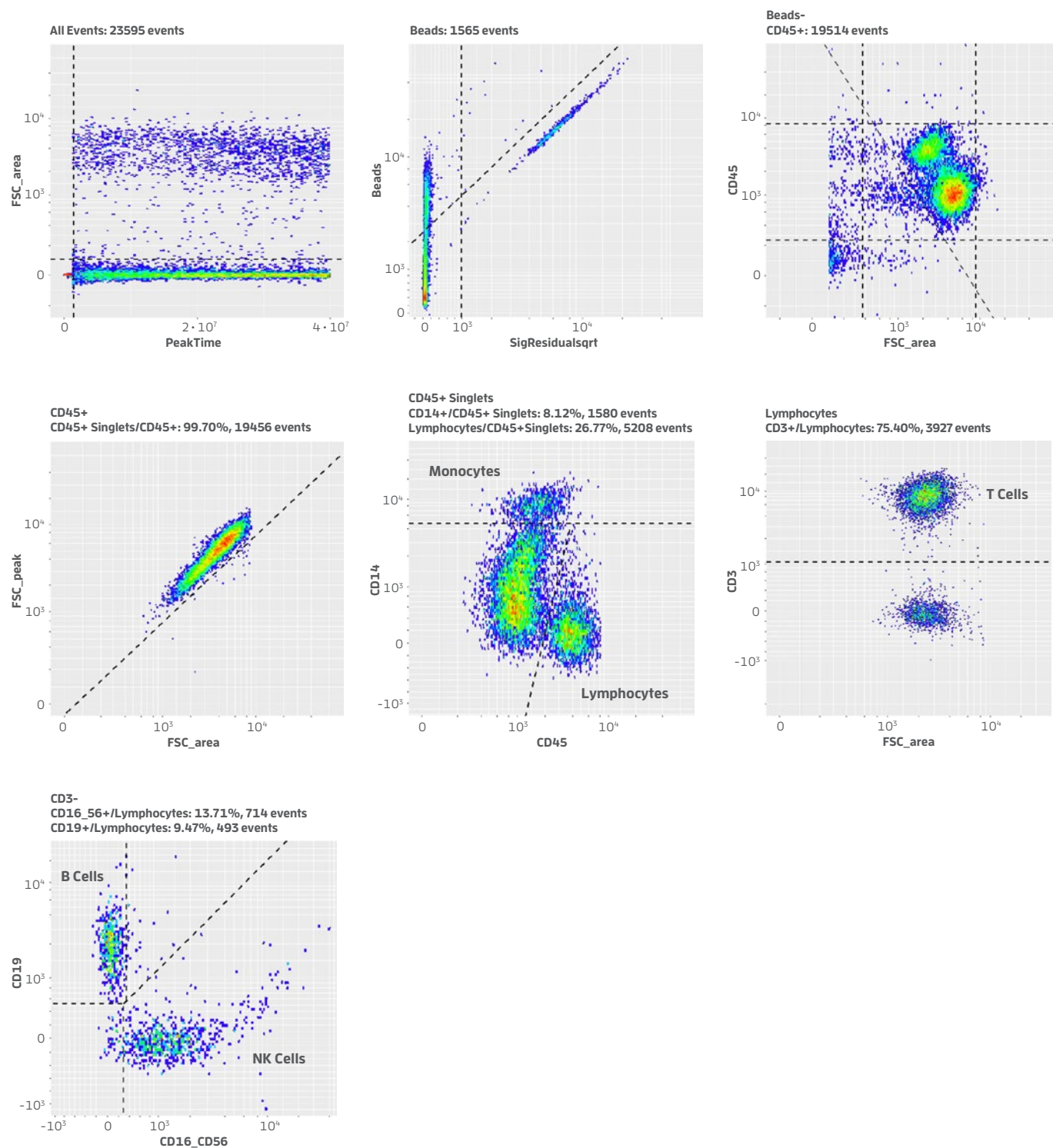
## KEY BENEFITS

- + Each assay incorporates an Accellix cartridge with a unique QR code, simplifying the workflow and reducing the chances for human error.
- + Unitized, dried-down reagents are stable at ambient temperature, and increase repeatability and accuracy.
- + Each assay contains a viability dye and count beads, obviating the need for separate viable cell counting and providing in-run QC.



**Figure A** - TBNK-I6 RTF Assay (Cat. No. AI003-IL) was run with apheresis sample and automatically running the Accellix autoclassification algorithm for analysis, utilizing the following gating strategy clockwise from left to right:

Peak time plot > Bead identification plot > Cells identification plot (CD45+ events) > Singlets plot > Live CD45+ cells plot > Identification of Monocytes (CD14+) from live CD45+ cells plot > Identification of T Cells (CD3+), Monocytes (CD14+), and TCell-Monocyte Complex (CD14+CD3+) from Viable CD45+ cells (parent gate) plot > Identification of Lymphocytes from CD14- cells (parent gate) plot > Identification of CD3+ T Cells from Lymphocytes (parent gate) > Identification of CD3+CD16\_56+ (NK T Cells) from CD3+ Cells (parent gate) > Identification of CD3-CD16\_CD56+ (NK Cells) from CD3- cells (parent gate); and CD19+ (B Cells) from CD3- cells (parent gate).



**Figure B** - TBNK-I6 RTF Assay (Cat. No. A1003-IL) was run with CD Chex Plus control blood sample and automatically running the Accellix autoclassification algorithm for analysis, utilizing the following gating strategy clockwise from left to right:

Peak time plot > Bead identification plot > Cells identification plot (CD45+ events) > Singlets plot > Identify CD14+ (monocytes) and lymphocytes out of singlets > Identify CD3+ T Cells out of lymphocytes (parent gate) > Identify CD19+ (B Cells) and CD16\_CD56+ (NK Cells) out of lymphocytes (parent gate).



CATALOG NUMBER	ASSAY NAME	DESCRIPTION	CONTENTS
A1002-4L	TBNK RTF Assay (L)	Basic lymphocyte subset panel with lysis buffer for apheresis or samples requiring RBC lysis	CD45-PECy7, CD3-PECy5, CD14-PED594, CD19-PE, CD56-AF488, DiYO-3 Viability, Control Beads
A1002-4NL	TBNK RTF Assay (NL)	Basic lymphocyte subset panel with non-lyse buffer for purified cells or drug product	CD45-PECy7, CD3-PECy5, CD14-PED594, CD19-PE, CD56-AF488, DiYO-3 Viability, Control Beads
A1003-1L	TBNK-16 RTF Test Kit (L)	Expanded lymphocyte subset panel with CD16 antibody and lysis buffer for apheresis or samples requiring RBC lysis	CD45-PECy7, CD3-PECy5, CD14-PED594, CD16-AF488, CD19-PE, CD56-AF488, DiYO-3 Viability, Control Beads
A1003-1NL	TBNK-16 RTF Test Kit (NL)	Expanded lymphocyte subset panel with CD16 antibody and non-lyse buffer for purified cells or drug product	CD45-PECy7, CD3-PECy5, CD14-PED594, CD16-AF488, CD19-PE, CD56-AF488, DiYO-3 Viability, Control Beads