DATA SHEET

T CELL HEALTH ANNEXIN V ASSAY (NON-LYSE)

CONTENTS

- Two microfluidic cartridges with non-lyse buffer
- Two tubes with dried reagents

STORAGE

Dry cool place protected from light

DESCRIPTION

MARKER	FLUOROPHORE	CLONE
CD45	PE/Cyanine7	HI30
CD3	PE/Cyanine5	UCHT1
CD4	PE	RPA-T4
CD8	PE/Dazzle594	RPA-T8
Annexin V	AF488	N/A
Viability	DiYo-3	N/A
Control 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 stable, single-use microfluidic cartridges using unitized and dried reagents that are stable at ambient temperatures. The dried reagents also have control beads, enabling cell counting and in-run QC for every assay. Each assay incorporates Accellix cartridges with a unique QR code, simplifying the workflow and reducing the chances for human error.

INTENDED USE

The Accellix T Cell Heath Annexin V (Non-Lyse) Assay can be used to monitor early indicators of apoptosis and viability as a readout for T cell health after genetic modification, expansion, or cryopreservation in CAR-T manufacturing. The assay uses annexin V, a phospholipid-binding protein, as an early apoptosis marker detecting membrane phosphatidylserine (PS) translocation from the inner to the outer layer of the plasma membrane, indicative of a compromised cell membrane. The assay fluorescently labels early apoptotic (annexin V +ve, viability dye -ve) and late apoptotic/necrotic cells (annexin V +ve, viability dye +ve), in addition to cell-surface markers required for the identification of T cell subsets, including viable CD45+ leukocytes, CD3+ T cells, CD4+ T helper cells, and CD8+ cytotoxic T cells.

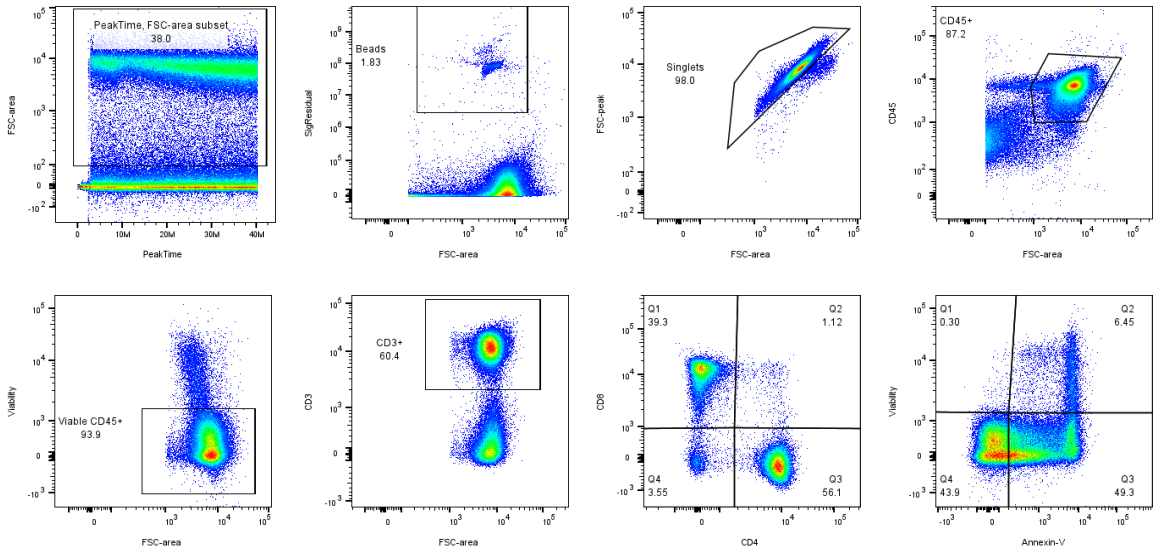
This is a two-cartridge assay that includes a full stain (FS) cartridge and a fluorescent minus one (FMO) negative control cartridge that does not contain Annexin V. The assay works with purified, cultured, or cryopreserved samples that do not contain red blood cell (RBC) contamination. It is not intended for samples that require RBC lysis (e.g., apheresis material, whole blood, or samples containing RBC contamination). Best results are obtained using samples with **cell concentrations of 5 – 20 million cells/mL**. A detailed protocol can be found in the Accellix Assay (Dual Cartridge) Instructions for Use located in the Technical Resources section on accellix.com.

KEY BENEFITS

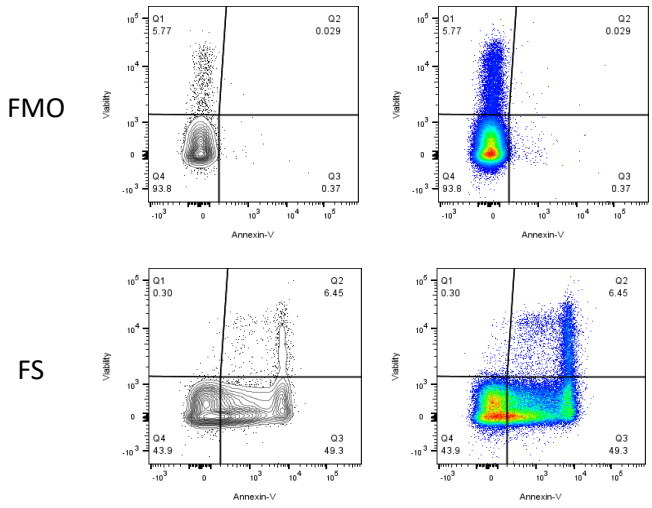
+ Each assay incorporates an Accellix cartridge with a unique QR code, simplifying the workflow and reducing the chances for human error.

+ 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.



Cryopreserved PBMCs thawed and stained with the T Cell Health Annexin (V) NL assay. Recommended gating strategy.



FMO and FS gating strategy

CATALOG NUMBER	ASSAY NAME	DESCRIPTION	CONTENTS
A1007-1NL	T Cell Health Annexin V Assay (NL)	Single use two-cartridge assay for the detection and enumeration of early and late apoptotic T cell subsets, including CD45+ leukocytes, CD3+ T cells, CD4+ T helper cells, and CD8+ cytotoxic T cells in purified, cultured or cryopreserved samples. Not intended for samples that require red blood cell lysis. Includes full stain (FS) cartridge and fluorescence minus one (FMO) negative control cartridge containing non-lyse buffer.	FS dried reagents containing CD45-PECy7, CD3-PECy5, CD4-PE, CD8-PED594, Annexin V-AF488, Viability, Control Beads FMO dried reagents containing CD45-PECy7, CD3-PECy5, CD4-PE, CD8-PED594, Viability, Control Beads Calcium is present in the dried reagent formulation.