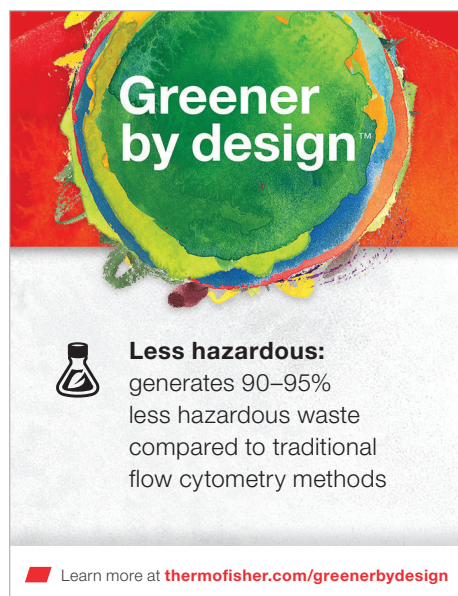


Attune and Attune NxT Flow Cytometers



Introduction

Thermo Fisher Scientific is committed to designing our products with the environment in mind. This fact sheet provides the rationale behind the environmental claim that this product is less hazardous, producing less hazardous waste than traditional flow cytometry methods.

Product description

Invitrogen™ Attune™ and Attune™ NxT Flow Cytometers provide both high sensitivity and high throughput—without sacrificing performance or accuracy. The Attune and Attune NxT Flow Cytometers use ultrasonic rather than hydrodynamic forces to position cells in a single, focused line along the central axis of the capillary. This allows the cells to be tightly focused regardless of the sample-to-sheath ratio, without high-velocity or high-volumetric sheath fluid. With the Attune and Attune NxT instruments, you can control your sample concentration, the flow rate, the number of photons you detect, the length of your experiment, the number of samples you run and more. Best of all, our technology makes all of this easy to do.

Green feature

Less hazardous

The Attune and Attune NxT Flow Cytometers generate less biohazardous waste per run due to low sheath fluid usage. Conventional flow cytometers use a separate cart, filled with large bottles of

fluid to process samples, while the Attune cytometer requires only a 1 L bottle of Focusing Fluid and 500 mL each of Wash Solution and Shutdown Solution (onboard the instrument) to process samples.

In addition, high sample collection rates enable a no-wash/no-lyse protocol that minimizes cell loss and damage. The Attune NxT cytometer requires a 2 L bottle of Focusing Fluid and only 250 mL each of Wash Solution and Shutdown solution. This also reduces the generation of biohazardous waste during sample preparation.

Conventional instruments generate up to 20 L of biological waste per run, whereas the Attune cytometer will generate only 1 L of biological waste per sample run (and the Attune NxT generates only 2 L). Overall, this means less biohazardous waste to manage and dispose of in the lab.

Designing the Attune and Attune NxT Flow Cytometers to generate less hazardous waste while delivering expected performance and accuracy is a win for our customers, our company and the planet.