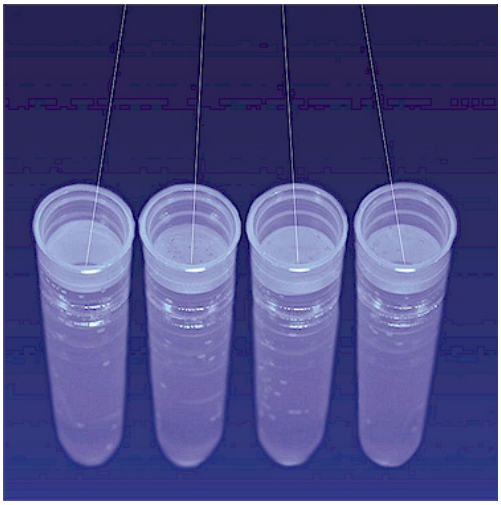
MoFlo® 4Way™ Sorting Accessory

CYTOMATION
Better Tools. Good Science.



4Way Sorting upgrades the standard two stream capability of the MoFlo cytometer to three and four stream capability. This means researchers can sort more subsets faster and waste fewer cells than has ever before been possible.

SIMULTANEOUS SUBSETS

As cells of interest become more specifically defined, researchers find themselves sorting a given sample multiple times to extract the desired cells. This wasteful and inefficient strategy is no longer necessary. With 4Way Sorting, a researcher can define up to four unique populations of interest based on as many fluorescence parameters as there are photo-multiplier tubes (PMTs) on the system (Figure 1). The 4Way Sorting accessory adds the sort logic and counters for the additional sorted streams, allowing three or four subsets to be simultaneously sorted into a variety of standard tubes or cuvettes.

DIGITAL STREAM CONTROL

The Cytomation Sort Unit (CSU) controls droplet formation during a sort. This all-digital computer-controlled device allows the operator to manipulate both droplet shape, by virtue of the total programmability of the droplet formation waveform, and droplet charging. The dedicated processor in the CSU is actually a computer in itself. This means that unlike analog modules that have built-in obsolescence, the CSU can be re-programmed to meet future needs.

SIMPLE OPERATION

4Way Sorting is a feature that may be routinely used by any operator. The difference between normal bi-directional sorting and 4Way Sorting is just a couple of simple steps; the user interface is essentially the same.

FUTURE AUTOMATION

The 4Way Sorting accessory is another module in Cytomation's continuing plan to automate the MoFlo's sort process. Cytomation is unique in employing microprocessor-control for these modules. These modules are programmable and will be able to communicate with each other to coordinate the sort process. Cytomation is designing in the power and flexibility necessary for a fully integrated, automated sort.

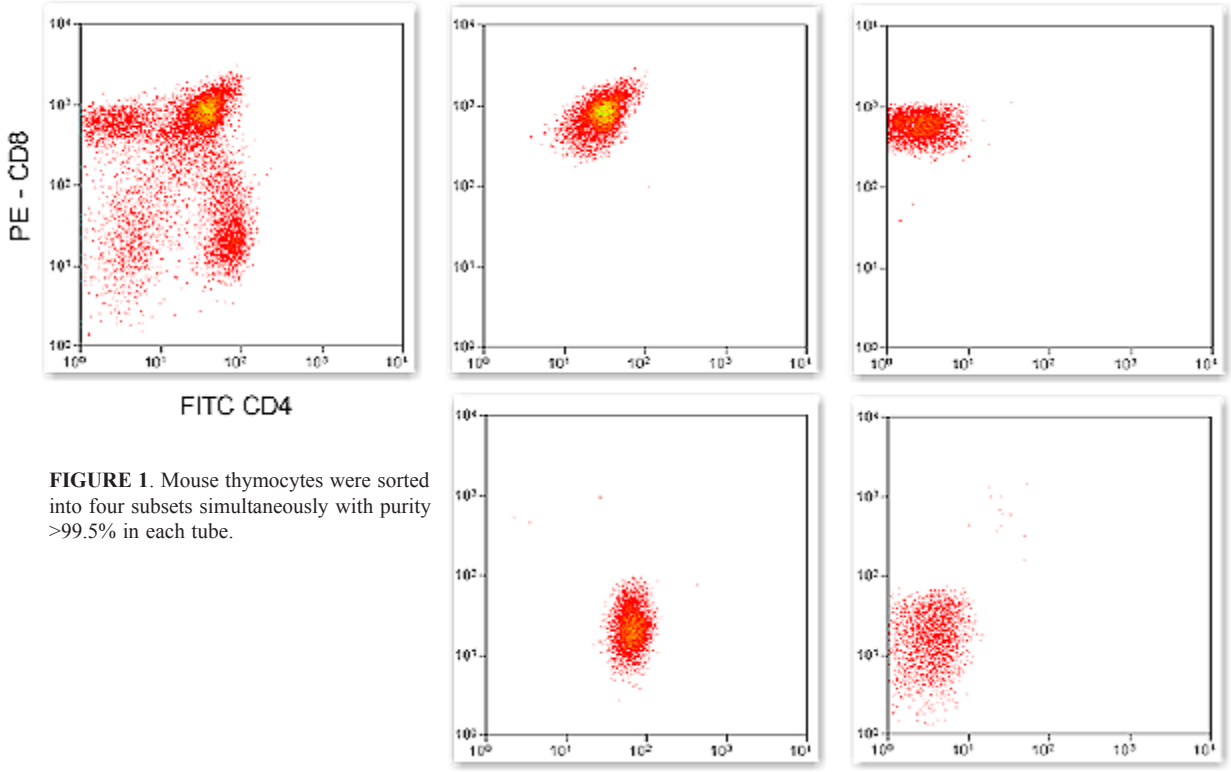


FIGURE 1. Mouse thymocytes were sorted into four subsets simultaneously with purity >99.5% in each tube.

4WAY SORTING TECHNICAL SPECIFICATIONS

4Way Sorting includes:	Lookup Table Module (qty 2)
	CSU Counter/Abort Module
	4Way Sorting base
	4Way Sorting cover
	1.5 ml micro-tube holder
	Cytomation 7 ml 4Way cuvette holder
	Cytomation 7 ml 4Way cuvettes (qty 8)
	1.5 ml micro-tubes (qty 1000)
Collection Tube Sizes:	1.5 ml micro-tubes, Cytomation 7 ml 4Way cuvettes
Stream Separations:	13 mm
Maximum Cells per Second:	70,000
Maximum Droplet Formation Rate:	200,000 drops/second
Charging Voltages:	200 volts

Cytomation, Inc. is a privately held bio-technical instrumentation corporation specializing in high-performance, high-speed flow cytometer analyzers, sorters and upgrades. Our mission is to design, produce, and service the finest flow cytometers and cell sorters in the world — unparalleled in performance, accuracy, versatility, reliability and speed. MoFlo, our premier flow cytometer, is a modular system that is easily upgraded whenever requirements change or new modules become available.

North America
Cytomation, Inc.
4850 Innovation Drive
Fort Collins, CO 80525
USA
Telephone: 970.226.2200
Facsimile: 970.226.0107
E-mail: info-northamerica@cytomation.com

Europe
Cytomation Bioinstruments GmbH
Engesserstrasse-4
79108 Freiburg im Breisgau
Germany
Telephone: 49.761.559.7370
Facsimile: 49.761.559.7375
E-mail: info-europe@cytomation.com

Australasia
Cytomation PTY LTD
60-66 Hanover Street
Fitzroy, Vic 3065
Australia
Telephone: 613.9417.4577
Facsimile: 613.9417.2987
E-mail: info-australasia@cytomation.com

February 10, 2000