

Highway1

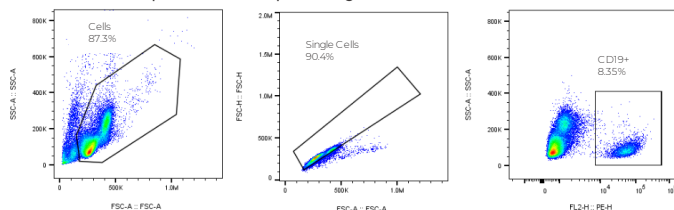
The fastest, gentle, sterile
cell sorter for every lab

Application note

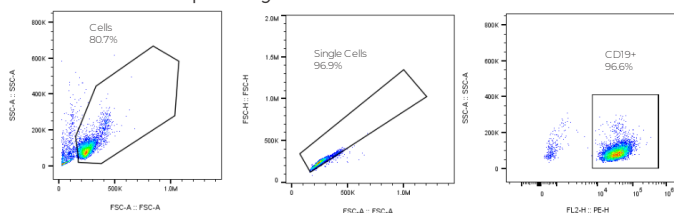
Automated Cell Sorting of PBMCs

B cells, T cells, and Monocytes

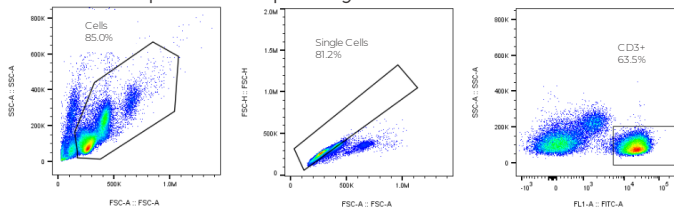
B cells pre-sort purity 8.35%



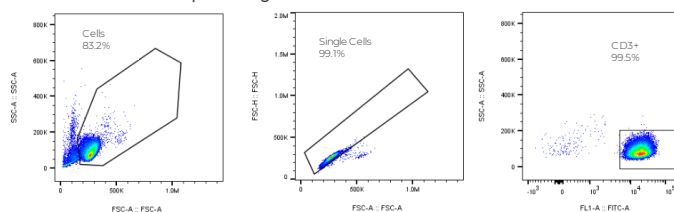
Post-sort purity 96.6%



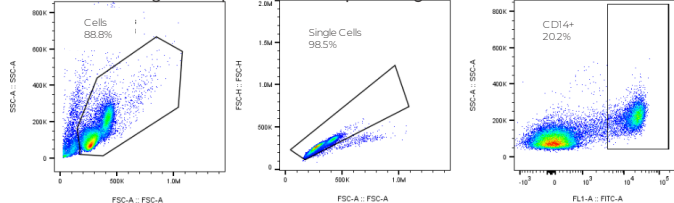
T cells pre-sort purity 63.5%



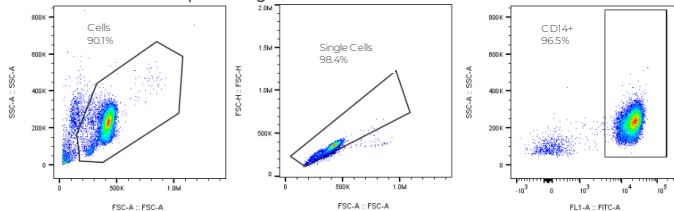
Post-sort purity 99.5%



Monocytes pre-sort purity 20.2%



Post-sort purity 96.5%



Cryopreserved PBMCs from healthy donors were thawed then underwent density centrifugation to remove dead cells and debris. Cells were incubated with antibody as per manufacturer's instructions and prepared to a concentration of 2.1 ± 0.2 million cells/mL. The sort buffer was HBSS, 0.1% Pluronic-188.

First, detectors were set to optimised voltages. Cells were gated using FSC-A vs. SSC-A, and then doublets were removed using FSC-A vs. FSC-H. B cells were selected using CD19-PE; T cells were selected using CD3-BB515; Monocytes were selected using CD14-FITC, as shown in the pre-sort plots.

For sorting, B and T sorts were run at 8,000 events per second (EPS), and Monocyte sort was run at 10,000 EPS. All sorts were run in a purity mode. The post-sort purity ranged from 96.5%-99.5%, as shown in the post-sort plots.

Panel

Antibody	Product number	Manufacturer
CD3-BB515	565100	BD
CD14-FITC	ab28061	Abcam
CD19-PE	555413	BD

Contact us

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Highway1

The fastest, gentle, sterile
cell sorter for every lab



Fast

With cell throughput rates of 37,000 per second in enrichment mode and 10,000 per second in purity mode, the Highway1 is the fastest microfluidic chip sorter.

Gentle

Using patented VACS™ technology, The Highway1 reduces cell stress compared to conventional droplet sorters.

Sterile

Samples are run in sterile, single-use cartridges without sheath fluid to prevent sample contamination using the Highway1.

For every lab

The intuitive software simplifies the sorting process so the Highway1 can be used in every lab.

Highway1 Instrument and desktop PC



Highway1 product list	Item number
Highway1 Instrument	A10000-1001
Highway1 Syringe Adaptor 3ml	A10000-1029
3ml Syringe (pack of 25)	A10000-1073
3ml Syringe Blunt Needle (pack of 100)	A10000-1076
3ml Syringe Strainer (pack of 25)	A10000-1077
Highway1 Fan Filter (pack of 5)	A10000-1078
Daily QC Beads Kit (5ml)	A10000-1079
Highway Cold Pack Kit	A10000-1081
Highway1 Cartridge Rack	A10000-1082
Highway1 Cartridge	A10000-1083
Highway1 Cartridge Loader	A1000-1084
Highway1 Optics Wipes (pack of 30)	A1000-1101

Sterile cartridge, syringe and cartridge filler



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