

Highway1

The fastest, gentle, sterile
cell sorter for every lab

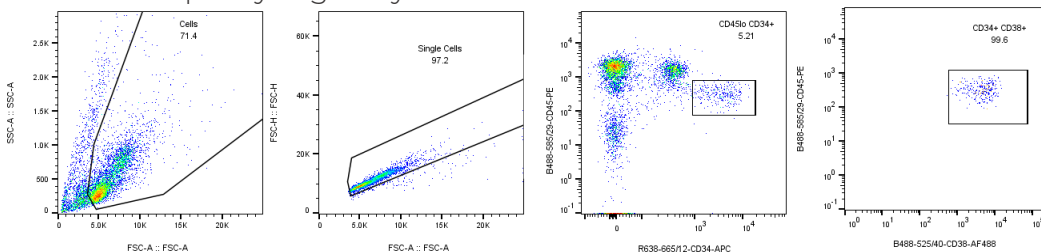


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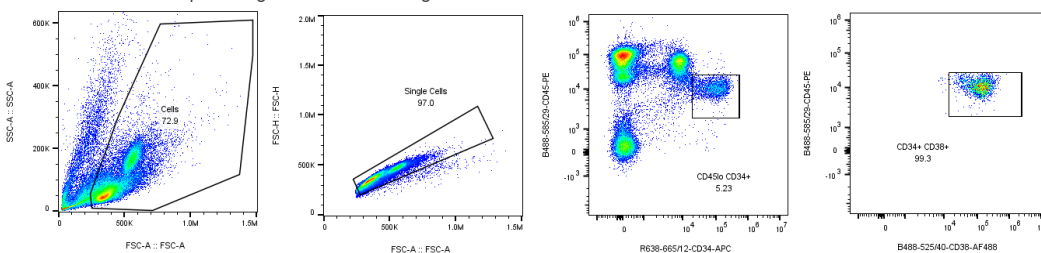
Application Note Fast Cell Sorting from Bone Marrow

Hematopoietic Stem Cells (HSCs)

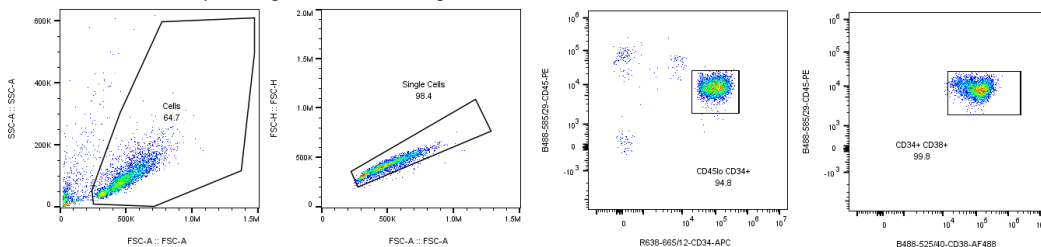
Pre-sort purity Highway1 5.19%



Pre-sort purity external cytometer 5.19%



Post-sort purity external cytometer 94.6%



Cryopreserved bone marrow mononuclear cells (BM MNCs) from healthy donors were thawed and then incubated with the antibodies detailed in the table below. Cells were prepared to a concentration of 2.0 million cells/mL in HBSS, 0.1% Pluronic-188.

Detectors were set to optimised voltages on the fully stained sample, then single colour controls using Thermo Fisher Ultracomp beads were used to set the compensation. Cells were gated using FSC-A vs. SSC-A, and then doublets were removed using FSC-A vs. FSC-H. HSCs were selected as APC-CD34+, PE-CD45lo, and AF488-CD38+, using FMOs to set the gates.

12,000,000 cells were run in 6mL in 22 minutes. The sort was run at 9,000 events per second in purity mode giving a post-sort purity of 94.6% and a recovery of 61%.

Panel

Antibody	Product number	Manufacturer
CD34-APC	343608	Biolegend
CD38-AF488	356663	Biolegend
CD45-PE	303008	Biolegend

Contact us

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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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