

# Highway1

The fastest, gentle, sterile  
cell sorter for every lab

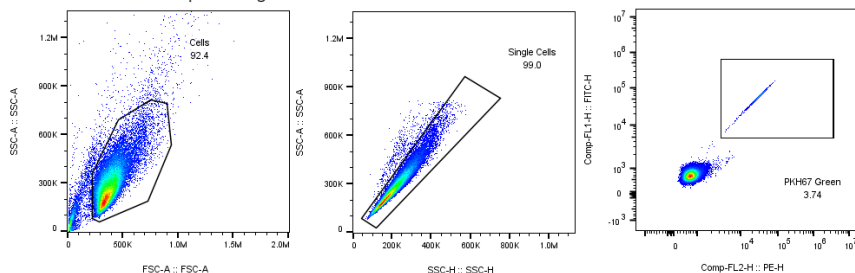


A TTP Company

## Truly Gentle Enrichment Sorting

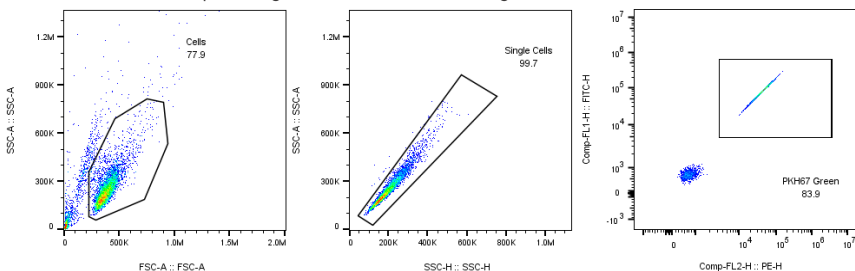
THP-1 and CHO-K1 cell lines

Pre-sort purity 3.74%



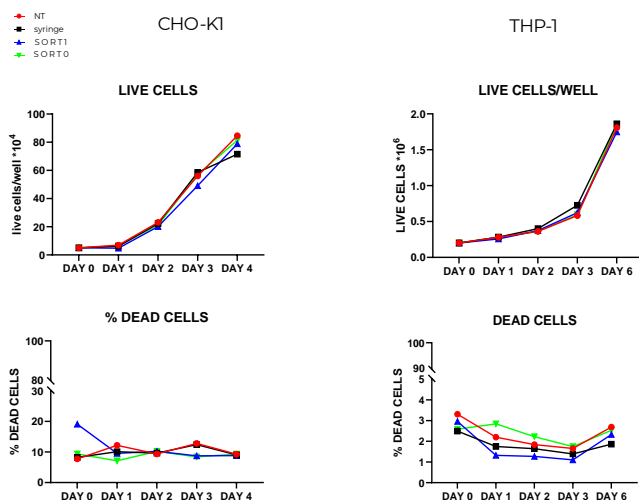
Cryopreserved CHO-K1 cells were thawed at passage 14. Cells were grown up and harvested at around 90% confluency using HBSS, 0.25% trypsin, and resuspended in HBSS, 0.1% Pluronic-188 with Benzonase and 0.3mM Magnesium Chloride.

Post-sort purity 83.9%, recovery 80%

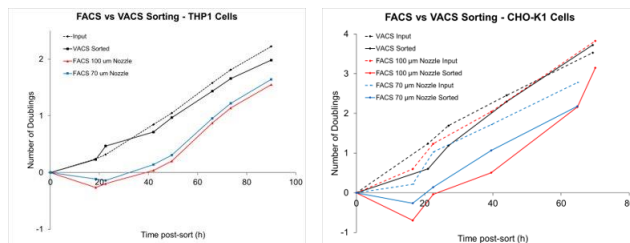


For sorting, around 4% of cells were stained with PKH67 green and spiked into the unstained sample to give a cell concentration of 2 million/mL. Cells were run at 9,000 events per second and PKH67 green positive cells were sorted in enrichment mode. The purity increased from 3.74% to 83.9%, and the recovery was 80%.

## Viability and growth assays using CHO-K1 and THP-1 cells



Growth of CHO-K1 and THP-1 cells on a conventional droplet sorter showed a 1-day growth lag compared to Highway1 and non-sorted control.



Growth and viability of CHO-K1 and THP-1 cells deflected on Highway1 (sort1) showed no reduction compared to the non-treated control (NT), cells pressurised in the syringe only (syringe), or non-deflected cells (sort0) passed through Highway1.

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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