

Cell Separation System

Disposable cell concentration chip

Cellpuri®



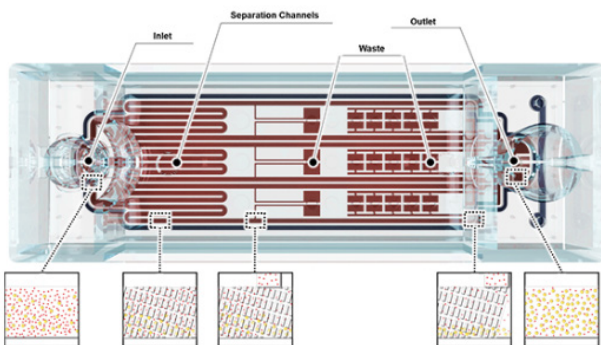
A disposable chip that concentrates cells without the centrifugation process. The chip enriches cells using rheological phenomenon inside the microchannels where cell suspension pass through to separate the cells from the media.

- User-friendly disposable cell concentration chip
- Enriches cells more than 20 times in 2 minutes
- Centrifugation-free workflow minimizes cell damage
- All processes are done inside the clean bench
- 95% recovery when cell washing
- Reduces human error as enrichment is automatically processed using the syringe pump



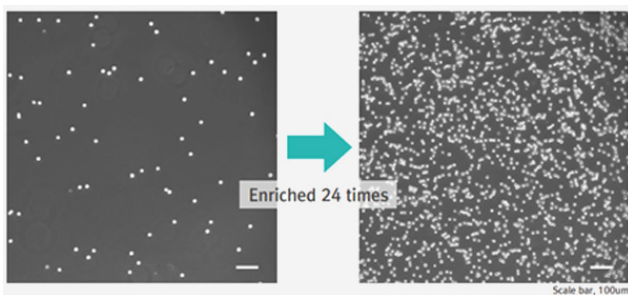
Its compact design allows for easy integration into clean bench environments, reducing contamination risks and enhancing overall cell safety during processing.

Filterless Filter (FLF Technology)



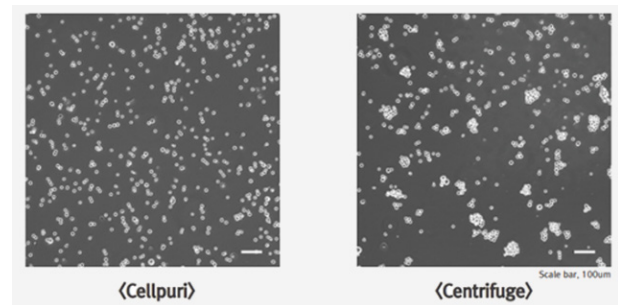
It is a microfluidic chip-based cell separation and concentration technology. Countless micrometer-sized channels inside the chip create a rheological flow that separates, concentrates, and removes particles of a specific size from the solution. Microchannels were strategically designed to isolate cells according to their size where larger cells are directed towards one side whereas smaller cells flow randomly on lateral axis that eventually compile on the other side. FLF technology can be applied to cell enrichment, white blood cell separation, and blood-plasma separation.

Cell Enrichment



Cellpuri® efficiently separated HL-60 cells from medium without spinning-down the cells and more than 20-fold enrichment (121.2x10 cells/mL) was observed in HL-60 cells at an initial concentration of 4.9 x 10 cells/mL.

Reduced Cell Clumping



Adherent cells, including MCF7 cells, tend to form clumps during the cell passage. But as shown in above images, enrichment using Cellpuri® reduces cell clumping while centrifugation pellets the cells and thus increasing the clumping cells.

Specifications

Model	CELLPURI®
Sample size	7~15 µm size cells
Flow rate	1ml / min
Enrichment	20-fold
Yield	97%
Loading volume	20 ml
Dimension	76 x 25 x 23 mm

Cellpuri®

Model No.	Description
CPR-CE05	Cellpuri®, Cell Concentration chip (5 pcs/box)
CPR-SP01	Syringe pump