

Cell therapy manufacturing

EVOLVING

CTS DYNACELLECT MAGNETIC SEPARATION SYSTEM



A closed, automated isolation and bead removal system for cell therapy manufacturing

The Gibco™ CTS™ DynaCollect™ Magnetic Separation System offers exceptional cell recovery, purity, and viability; high throughput; process flexibility; and sterile single-use kits that enable the system to easily scale with your process from research to clinical manufacturing. The operator-independent system can help you isolate the right cells, minimize failures in manufacturing, and reduce contamination while providing increased robustness and precision.

Designed to be used with magnetic beads, the instrument utilizes an integrated magnet rocker and fluidics panel for targeted cell separation and bead removal in a closed, automated system. The intuitive, programmable interface, process flexibility, sterile single-use consumables, and software upgrades enable 21 CFR Part 11 compliance and allow the system to easily scale with your cell therapy workflow from process development to clinical manufacturing.

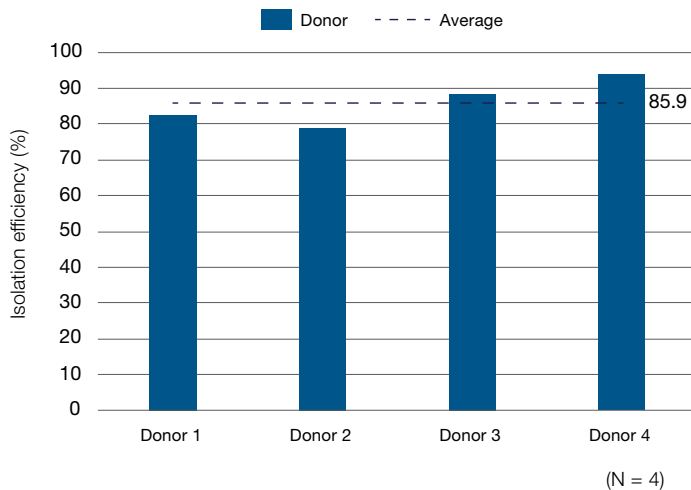
Key features of the CTS DynaCollect Magnetic Separation System:

- **Isolation efficiency, purity, and viability**—the system enables >85% isolation efficiency of target cells with >96% purity with minimal effect on cell viability
- **Process flexibility**—user-programmable software enables you to create and optimize a broad range of protocols
- **Speed**—a processing time of 70–100 minutes with Gibco™ CTS™ Dynabeads™ CD3/CD28 magnetic beads
- **Reproducibility**—coefficient of variation of 3%
- **Modular**—use independently or as part of your workflow
- **Research through commercial manufacturing**—the closed single-use kit enables sterile processing, and an Open Platform Communications–Unified Architecture (OPC-UA) interface enables connectivity to a 21 CFR Part 11–compliant system
- Helps enable cGMP-compliant clinical and commercial manufacturing

Streamline and expedite your cell therapy development with the CTS DynaCollect Magnetic Separation System—a flexible, automated, closed system that enables optimal cell isolation and bead removal.

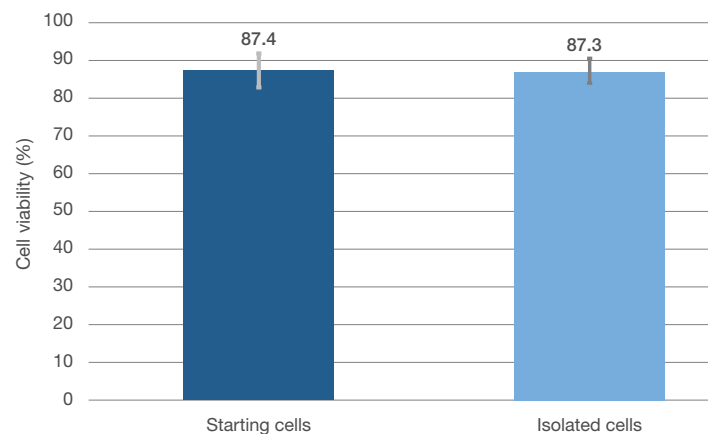
Isolation efficiency

A



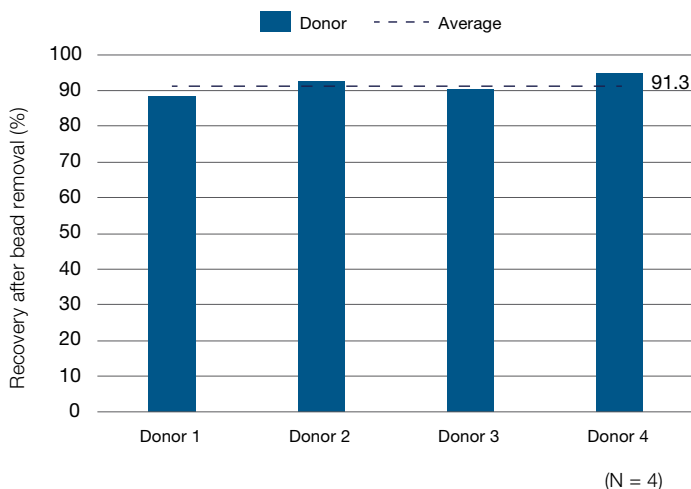
Cell viability

B



Strong isolation efficiency with minimal impact on cell viability. Using CTS Dynabeads CD3/CD28 magnetic beads and the CTS DynaCollect Magnetic Separation System, isolation efficiency was greater than 85% (A, N=4) and cell viability was maintained at 87% (B), as determined by flow cytometry.

Recovery of target cells



Bead removal process achieves high recovery of cells. Recovery after CTS Dynabeads CD3/CD28 removal was >91% (N=4). Recovery was assessed by cell counting before and after bead removal.

Specifications

CTS DynaCollect Magnetic Separation System	
Max. cell input	~10 billion T cells (1,000 mL isolation volume)
Pump speed	1–150 mL/min
Rocker angle	1–30°
Rocker speed	1–30 cpm
Air pressure	Max 2 bar
21 CFR Part 11–compliant	Yes
OPC-UA–compatible	Yes
Cloud connect utility	Yes
Touch display	20.32 cm
Voltage	100–240 V
Weight	50 kg
Depth	562 mm
Width	749.5 mm
Height	485 mm with pole

Ordering information

Description	Quantity	Cat. No.
CTS DynaCollect Magnetic Separation System + SmartStart Orientation at installation + 2-year warranty with planned maintenance (PM) in second year	1	A55867
CTS DynaCollect Magnetic Separation System + SmartStart Orientation + 2-year AB qualification with OQ post PM and/or repair + IQ/OQ at installation	1	A55868
CTS DynaCollect Cell Isolation Kit	5 pack	A52300
CTS DynaCollect Bead Removal Kit	5 pack	A52301

Learn more at thermofisher.com/dynacollect

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