

Immune Cell Cryopreservation Solution

In recent years, with the rapid advancement of cell biology, immune cell therapy has emerged as a novel medical approach, playing an increasingly vital role in treating challenging diseases such as hematologic tumors, solid tumors, and autoimmune disorders. In this process, efficient cell cryopreservation technology is a critical factor in ensuring cellular viability and therapeutic efficacy. Saicun Biology's innovative dual-system regulation model of "DMSO + ice-controlling materials" not only effectively inhibits the formation of ice crystals but also controls the growth of existing micro-ice crystals. This approach maximizes the preservation of cellular activity and functional integrity, providing a reliable safeguard for the cryopreservation and clinical application of immune cells.



Product Advantages

- Enhanced Safety

GMP manufactured with fully USP ingredients, Chemically defined, serum-free, protein-free, and animal-free
- Superior Efficiency

Enables cryopreservation of diverse immune cell types including CAR-T, UCAR-T, NK, CAR-NK, $\alpha\beta$ -T, and $\gamma\delta$ -T cells
- Optimal Convenience

Ready-to-use, freeze directly in -80°C freezer, Compatible with various production processes for flexible formulation

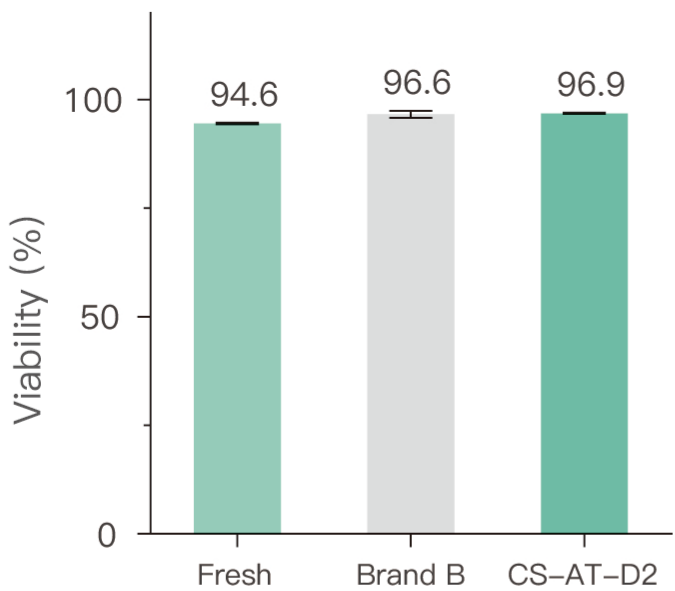
Immune Cell Cryopreservation Medium

For the cryopreservation of immune cells such as CAR-T, UCAR-T, NK cell, CAR-NK, $\alpha\beta$ -T cell or $\gamma\delta$ -T cell, etc. FDA master file No. 042219 / NMPA F20250000310, Supporting dual filings in China and the United States.

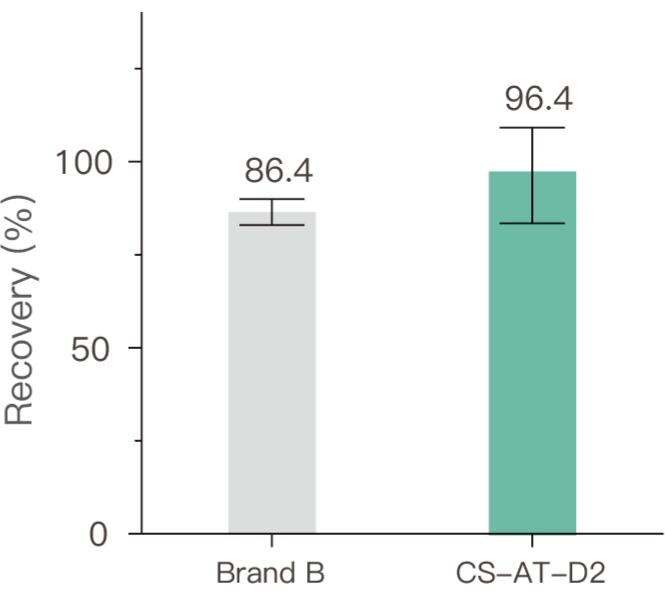
Product Performance

Product Code	Name	DMSO	Cryopres-ervation Density	Fresh CAR-T Cell Viability	Post-Thaw CAR-T Cell Viability			Post-Thaw CAR-T Cell Recovery		
					0h	1h	2h	0h	1h	2h
CS-AT-D2	Immune Cell Cryopreservation Medium	10%	1×10^6 – 1×10^8 /mL	93.45%	>90%	>90%	>88%	>96%	>95%	>90%

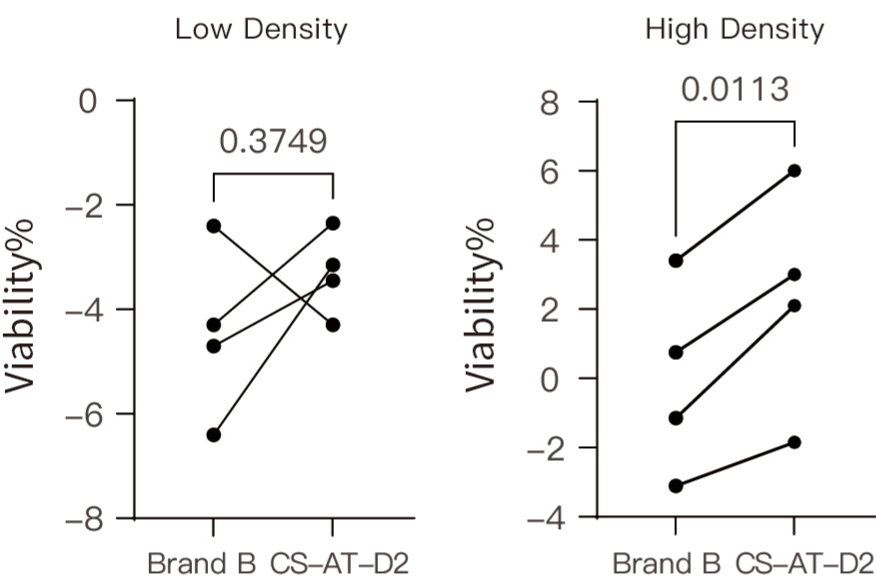
Preservation Density: 10 M/mL 1 M=1×10⁶ cells



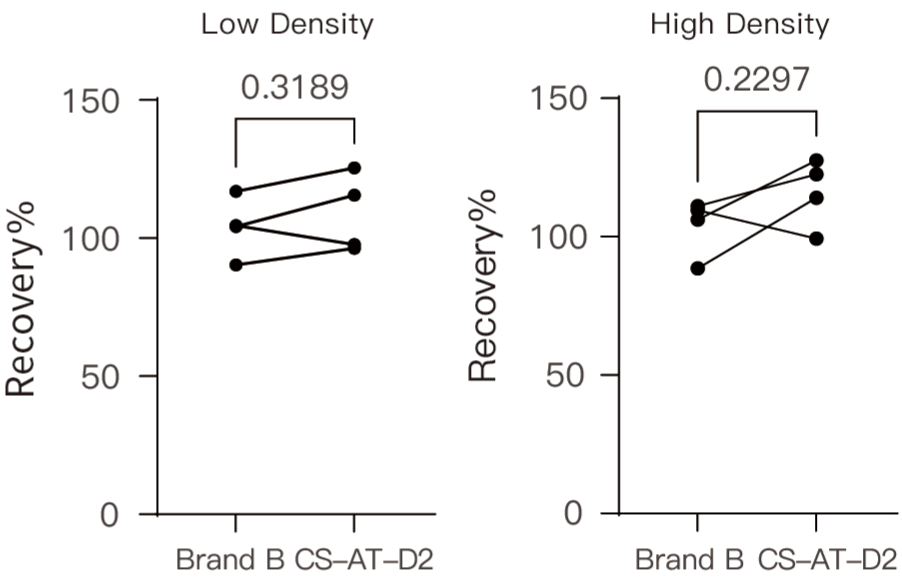
Comparison of Post-Thaw Cell Viability of αβ-T cell for one week



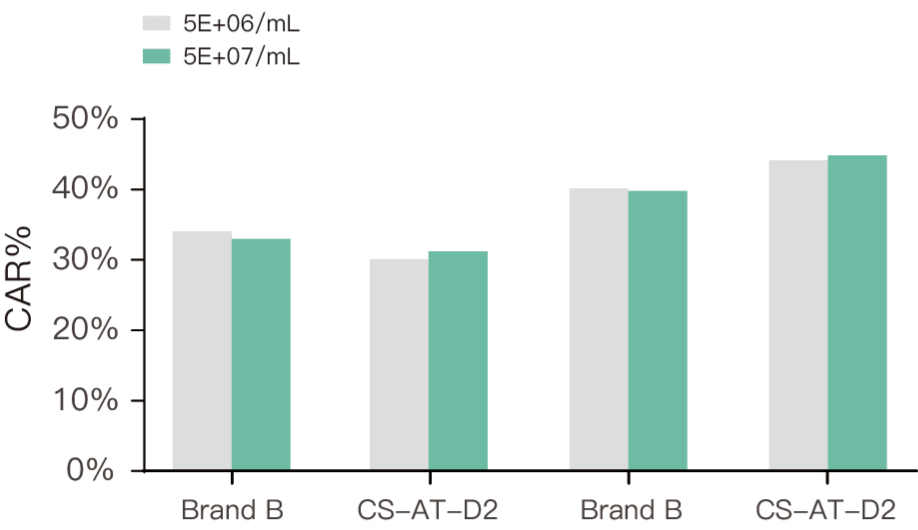
Comparison of Post-Thaw Live Cell Recovery Rates of αβ-T cell for one week



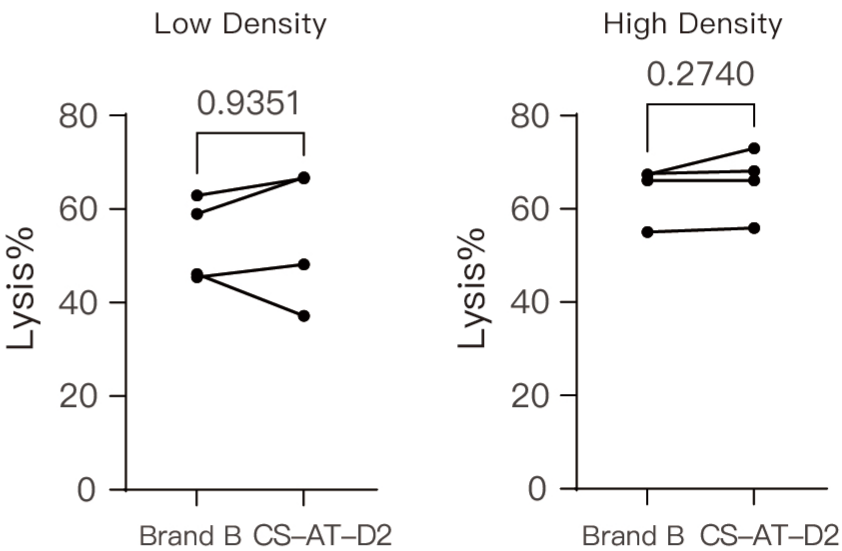
Comparison of Post-Thaw Cell Viability



Comparison of Post-Thaw Live Cell Recovery Rates



CAR⁺ rate after cryopreservation



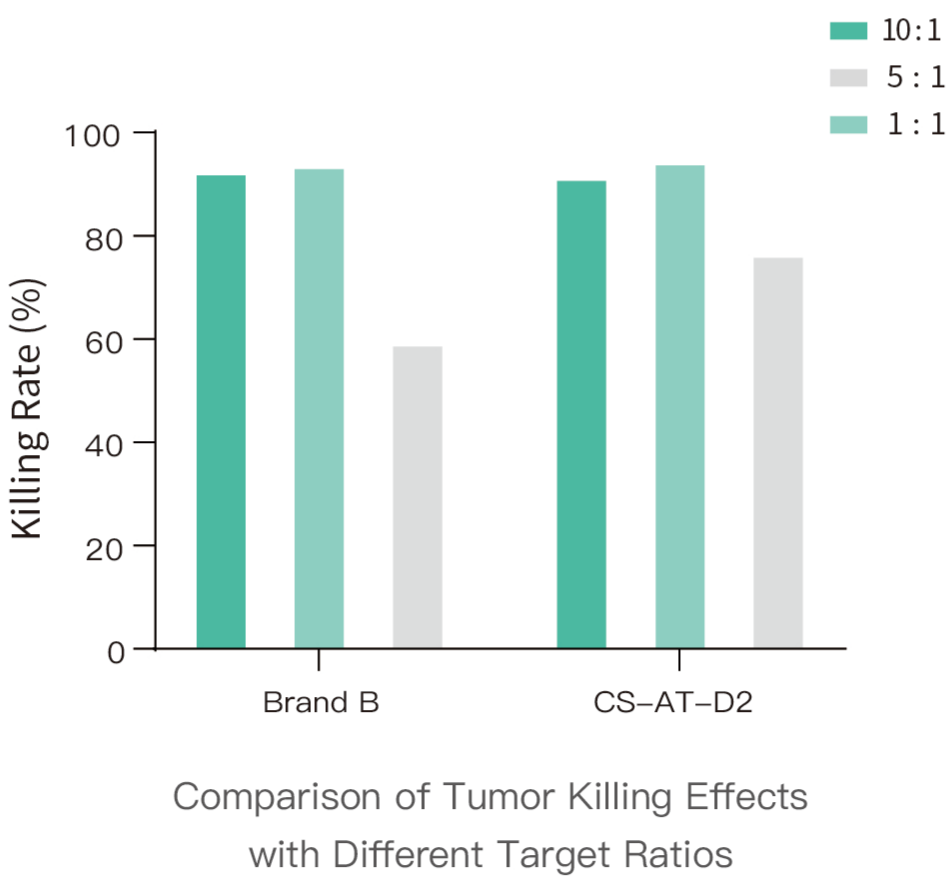
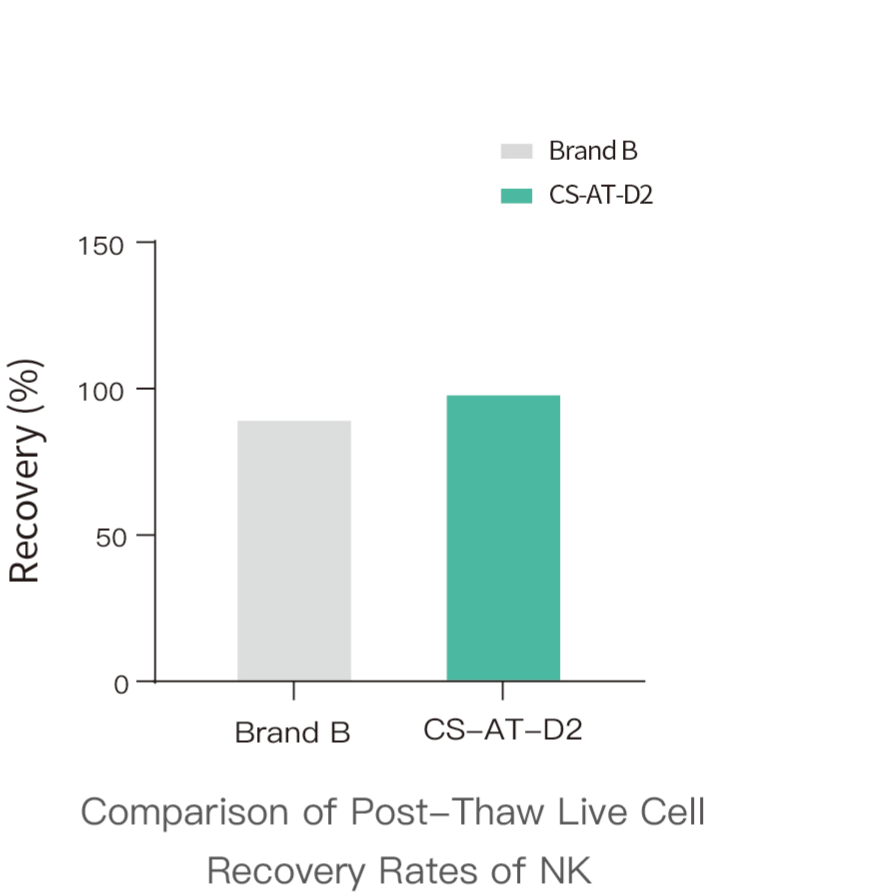
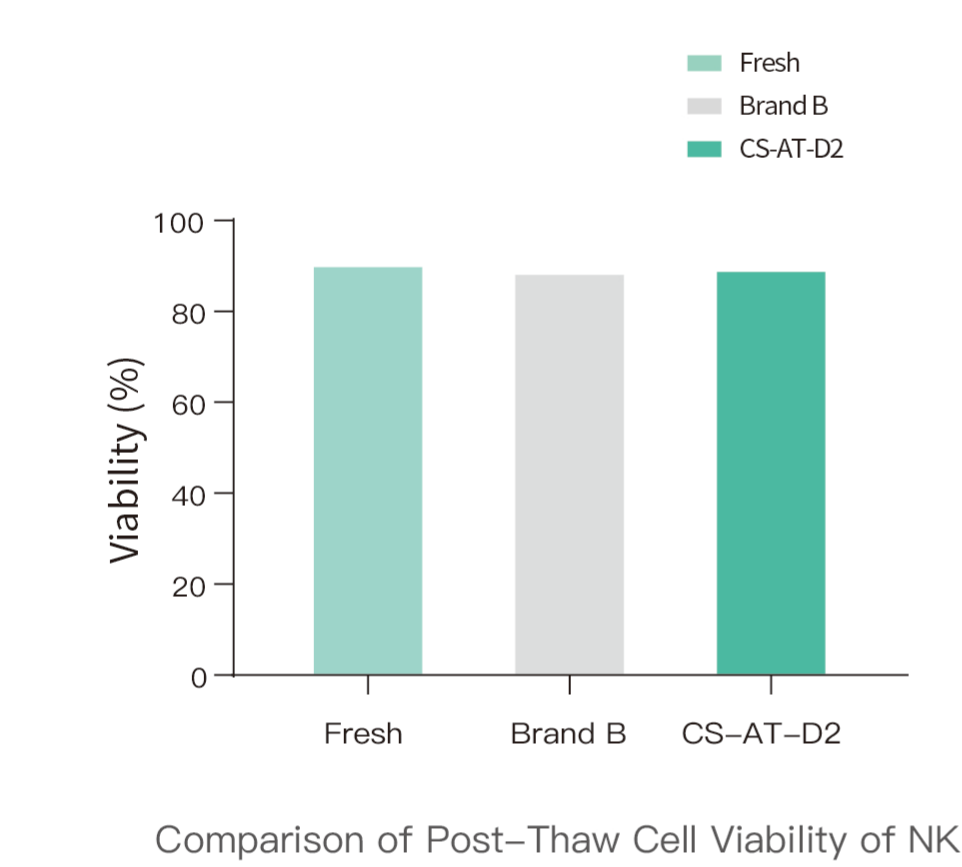
Comparison of Tumor Killing Effects with Different Target Ratios

CellStore CS-AT-D2 supports high-density, efficient cryopreservation of CAR-T cells. After resuscitation, cell viability, live cell recovery rate, tumor killing efficacy and CAR expression rate are all superior or equivalent to the control group.

Product Performance

Product Code	Name	DMSO	Cryopres-ervation Density	Fresh NK Cell Viability	Post-Thaw NK Cell Viability	Post-Thaw NK Cell Recovery	Tumor Killing Effects		
							10:1	5:1	1:1
CS-AT-D2	Immune Cell Cryopreservation Medium	10%	1×10 ⁶ –1×10 ⁸ /mL	92.65%	≥90%	≥90%	> 90%	> 90%	> 70%

Preservation Density: 200 M/mL 1 M=1×10⁶ cells

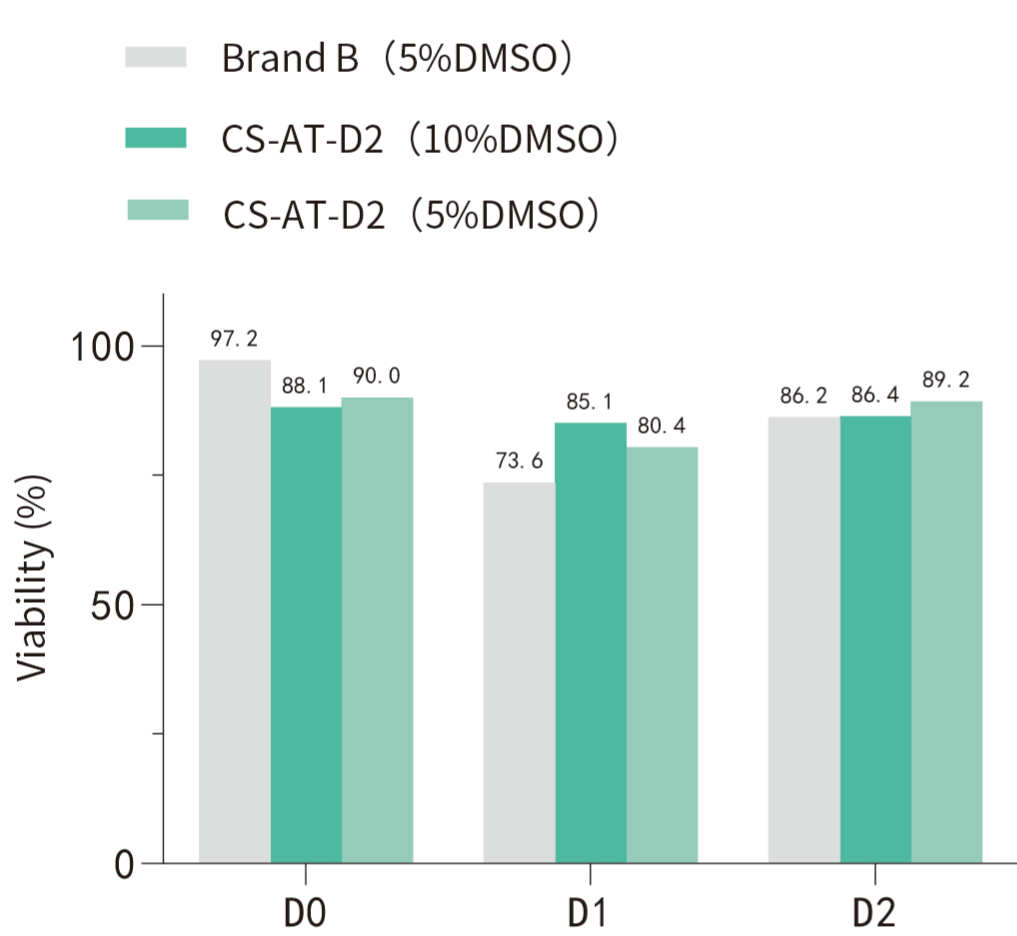


CellStore CS-AT-D2 supports high-density, efficient cryopreservation of NK cells. After resuscitation, cell viability, live cell recovery rate, and tumor killing efficacy are all superior to the control group.

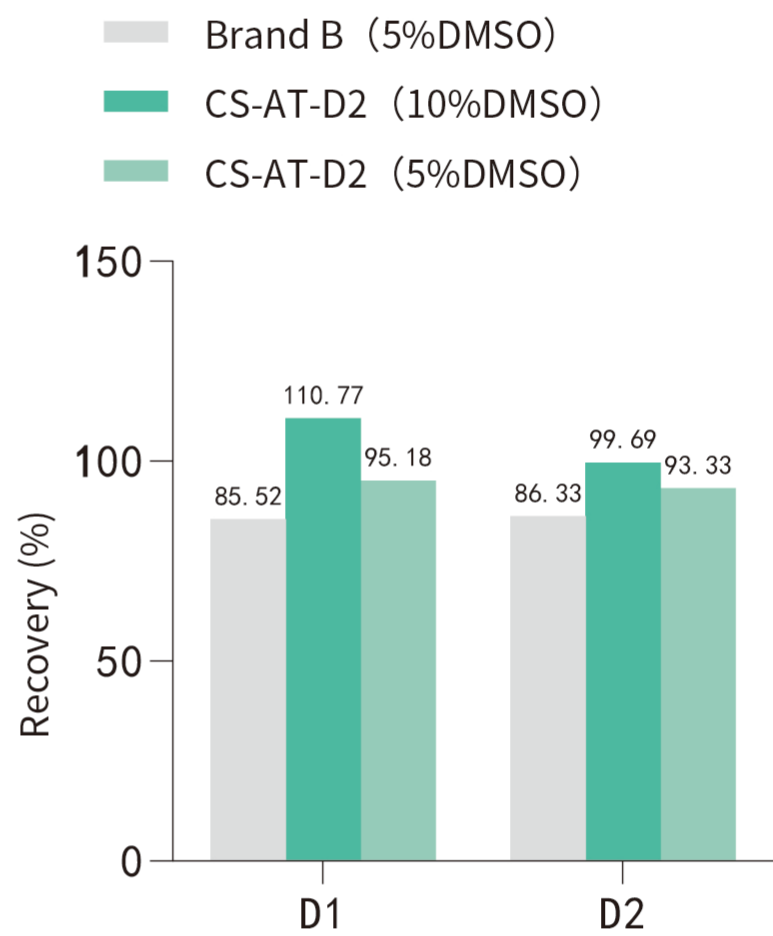
Product Performance

Product Code	Name	DMSO	Cryopres- ervation Density	Post-thaw & Reculture Viability of γδ-T Cells			Post-thaw & Reculture Recovery Rate of γδ-T Cells	
				D0	D1	D2	D1	D2
CS-AT-D2	Immune Cell Cryopreservation Medium	10%	1×10 ⁶ - 1×10 ⁸ /mL	>85%	>85%	>85%	>95%	>95%

Preservation Density: 50 M/mL 1 M=1×10⁶ cells



Comparison of Cell Viability at Different Time Points
Post-Thaw and Reculture of γδ-T Cells



Comparison of Recovery Rate at Different Time Points
Post-Thaw and Reculture of γδ-T Cells

Supports efficient cryopreservation of γδ-T cells and CAR-γδ-T cells, while maintaining high cell viability and live cell recovery rate after thawing and reculture

Ice Controlling Technology
For a Better Life

CellStore Biotechnology Co., Ltd.
✉ lumy@cellstorebio.com
🌐 www.cellstore-global.com