FRESENIUS KABI
caring for life

Lovo®

Automated Cell Processing System

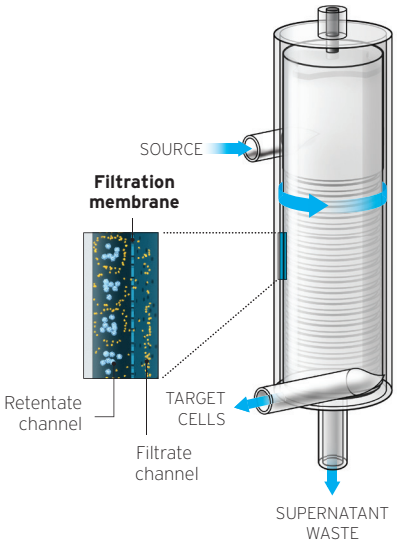
The easy-to-use, flexible, filtered way to wash and volume-reduce cell products.

For laboratory use only

Choose filtered to further your goals.

Whether you're focused on early stage trials or ramping up to full commercialization‡, Lovo's spinning membrane filtration technology enables fast, precise, and flexible procedures that help increase your lab's overall operational efficiency and processing consistency without compromising product quality.[2] You can rely on Lovo and the Fresenius Kabi team to work with you to address your lab's biggest challenges in developing cutting-edge cell therapy manufacturing solutions.

Proprietary spinning membrane filtration technology



Lovo supports your unique selection prep, thaw wash, or harvest wash processes.

Immunomagnetic Selection Prep

Remove platelets, incubate with beads, and remove unbound beads in a single procedure for fast and automated processing

Fresh Leukapheresis Wash

Remove platelets with precision and resuspend your cells in a preferred buffer for any custom manufacturing process

Culture Harvest & Media Exchange

Volume-reduce or exchange media for your expanded products with high cell recoveries and washout efficiency[2]

Thawed Wash & DMSO Removal

Wash cryopreserved products to remove DMSO and resuspend cells in your preferred buffer or culture media[1]

Increase operational efficiency

Cells continually flow in and out of Lovo's spinning membrane module, minimizing overall processing time. Lovo handles source volumes up to 22 L and processes a standard apheresis product in approximately 11 minutes.[3]

Increase product consistency and quality

Capture precisely the cells you need, optimizing recovery while maintaining viability – even for fragile cells. The membrane's 4 µm pores enable >98% TNC recovery and <2% decrease in viability when targeting 99.9% supernatant removal.[3]

Customize specific protocols to support your cell therapy manufacturing needs

Lovo's software has been designed to support your unique processes and technologies. Up to 10 protocols can be saved on the device and each wash cycle may be customized even further.

Lovo Software 3.0

Greater simplicity

- All-in-one immunomagnetic selection prep protocol
- Easy access to weigh scale calibration and log file
- Wash buffer volume tracking and alerts

More flexibility

- Multiple Source container processing
- Expanded range of cell component concentration entry values
- Configurable middle cycle washout percentages and final rinse volumes
- Administrator ability to pre-fill and lock operator entry fields and options

Fully connected

- Secure wired or wireless data transfer directly from the Lovo
- Uneditable, downloadable or printable procedure records
- Filterable procedure records
- Exportable from DXT® to Excel® or LIMS

Lovo Automated Cell Processing System

Instrument features

Cell types
Fresh, cryo-preserved, and culture-expanded white blood cells, including, but not limited to, leukapheresis CD34+ cells, CAR T-cells, TILs, NK cells, and MSCs

Volume range	
Source	Up to 22 L
Output*	50 mL – 50 L
Wash-out range	Up to 99.9999%*

System components
- 73 lb, 35.3" x 17.6" x 24.5" (W x D x H) benchtop instrument
- Single-use processing kit with spinning membrane module

* Actual lowest achievable volume will depend on cell type, cell concentration, and source volume.

‡ **The LOVO Cell Processing system is for laboratory use only. Unless the user has obtained advance clearance or approval from the appropriate regulatory agency, cells processed on this system are not intended for diagnostic purposes, direct transfusion, or for use in the production of therapeutic products or vaccines for clinical use. For applications requiring regulatory clearance or approval, users may request the required LOVO technical documentation from Fresenius Kabi to support their submissions.**

Refer to the the LOVO Cell Processing System Operator's Manual for a complete list of product precautions and warnings.

References

1. B.Mfarrej, et al. Pre-clinical assessment of the Lovo device for dimethyl sulfoxide removal and cell concentration in thawed hematopoietic progenitor cell grafts. Cytotherapy, Volume 19, Issue 12, 1501-1508.
2. Presented by Ian Gaudet, PhD. Senior Engineer, PCT. IBC Commercialization of Cell, Gene, and Immunotherapies, San Diego, CA. 2014.
3. LOVO 2.X Product Quality Test Results Design Review: 223-DER-048958 – Data on file at Fresenius Kabi USA.

Learn how choosing Lovo can help make your lab more productive:
Call 1.800.333.6925 or visit chooselovo.com

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0001-LOVO-01-04/19