

Ksep[®] 50

Single-Use Continuous Counterflow Centrifugation System

Product Information

Traditional centrifugation methods produce high shear forces that often damage cells during cell processing in advanced therapies. The Ksep[®] 50 system uses advanced counterflow centrifugation, which reduces shear forces and the potential for cell lysis, resulting in superior viability and greater recovery. The automated, single-use system minimizes the risk of contamination by reducing the need for manual handling and offers seamless scale-up from process development to commercial manufacturing.



Features and Benefits

- Gentle counterflow separation with minimal shear forces helps achieve high cell viability and supports a smooth transition from process development (0.1 L) to GMP production (35 L)
- Cell processing time is reduced by 50% in a closed cell harvest process
- High cell recovery > 90%
- Demonstrates robust performance across a wide range of cell densities, from very low (less than 1 million cells/mL) to extremely high (over 100 million cells/mL)

Relevant Applications

- Cell harvest
- Cell capturing, cell concentration
- Cell washing, media | buffer exchange
- Cell separation

Relevant Process Steps

- Clarification
- Harvesting
- Concentration
- Sterile filtration
- Fill and finish

Technical Specifications

Attribute	Ksep® 50
Counter flow centrifugal force [g]	2,000
Maximum peristaltic pump flow rate [L/hr]	48
Centrifuge chamber volume [mL]	50 (2 × 25)
Cell capacity per cycle*	Up to 10 Billion
Recommended input volume range [L]	0.1 - 35
Minimum output volume range [mL]	50
Process connection size	¼" × ⅛" C-Flex®
Dimensions (H × W × D, in cm)	176.3 × 72 × 81.8, 246 kg
Cell recovery [%]	>90
Cell viability [%]	<5 change

* varies with cell size and process parameters

Power supply	Unit	Value
Rated voltage	V _{AC}	200 - 240
Rated frequency	Hz	50/60
Power consumption	VA	1,700
Current consumption, maximum	A	16
Max. fluctuations in supply voltage from rated voltage	%	± 10
Protection class	IP	30

Ordering Information

Product Name	Description	Order Code
Ksep® 50 system	Ksep® 50 system	KSEP50
Ksep® 50 consumables	Ksep® 50 consumables set (includes tubing and chamber set)	KSEP50-SET



Peripherals and Accessories

Product Name	Order Code
Ksep® 50 Bagholder 0.5 1 L	KSEP50-BH-0.5-1L
Ksep® 50 Bagholder 10 L	KSEP50-BH-10L
Ksep® 50 Bagholder 3 5 L	KSEP50-BH-3-5L
Ksep® 50 MU Cleaning Rod	KSEP50-CT-ROD
Ksep® 50 SU Cleaning Swab	KSEP50-CT-SWAB

Germany

Sartorius Stedim Biotech GmbH
August-Spindler-Strasse 11
37079 Goettingen
Phone +49 551 308 0

USA

Sartorius Stedim North America Inc.
565 Johnson Avenue
Bohemia, NY 11716
Toll-Free +1 800 368 7178



For More Information, Visit

[sartorius.com](https://www.sartorius.com)

Ksep® Centrifugation System

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For details on the registrations please refer to <https://www.sartorius.com/en/patents-and-trademarks>

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