

CellShip®

Product Overview

CellShip® has been developed to provide an alternative to cryopreservation for the transport and short-term storage of mammalian cells. It is sterile, xeno-free, defined and contains a non-toxic additive designed to protect cells against shear stress, and to help maintain membrane integrity.



Key Benefits

Applications

For the transport and short-term storage of cells at ambient temperatures, as an alternative shipping cryopreserved samples. Application development for this product is ongoing, and CellShip® efficacy is currently being assessed for the transportation of additional primary cells, stably transfected and gene silenced cell lines.

Advantages of using CellShip®

- Ready-to-use transport and short-term storage medium, suitable for a wide range of cells.
- CellShip® provides flexibility to highly time critical processes.
- Removes the cost and logistic challenges associated with shipment on dry ice.
- CellShip® offers stable pH-buffering of pH 7.20 - 7.45 for temperatures between +2°C to +37°C.
- Can be used at ambient temperatures.
- Xeno-free i.e., free from serum and animal/human proteins.
- Endotoxin levels conform to EU standards (≤ 1.0 EU/mL).
- Solvent free i.e., free from DMSO.
- CellShip® is manufactured under ISO 13485.

Specification

Specification	Parameter
Country of Origin	UK
Sterility	Pass

Registration	The standard formats of CellShip® are registered as a medical device with MHRA. Any versions of CellShip® containing antibiotic or other additives are not currently UK CA/CE marked.
Filtration	0.2 µm
Shelf Life	CellShip® has a shelf life of 10 months from the date of manufacture when stored at +2 - 8°C under dark conditions.

Ordering Information

CellShip® is supplied as a sterile ready-to-use solution. CellShip® is available in the following formats.

Product Code	Product Description	Pack Size
SCS-004X	CellShip Cell Transport medium	50ml, 100ml

Table 1 NOTE: 'X' in the product code denotes the pack size. Please state the pack size required at the time of ordering.

Custom sizes available upon request.

Please contact our team for bespoke requirements on sales@lifesciencegroup.co.uk.



Storage

Recommended storage is +2°C to +8°C. Protect CellShip® from exposure to light.



Packaging & Shipping

Product ships at ambient temperature.

Development Data: Cell Lines

To date, CellShip has been validated for up to 120 h transport/storage at ambient temperatures, for a range of cell lines (Table 1) and for 72 h transport/storage of primary, canine mesenchymal stem cells (MSCs). The protocol requires minimal cell manipulation, reducing the risk of contamination and improving efficiency within the laboratory.

Cell line	Rationale for use	Viability at time of recovery		Fold change in cell number after recovery
Jurkat	Used as a T-cell model for clinical development of CAR-T therapies	72h 120 h	87% 81%	2.1 1.4
HEK-293	Used in biomanufacturing	72 h 120 h	98% 98%	4.5 2.3
Hep-G2	Drug development and toxicity testing	72 h 120 h	96% 98%	2.9 3.7
CHO	Used in biomanufacturing	72 h 120 h	97% 96%	6.5 5
K562	Biomedical research and cytotoxicity assays	72 h	98%	4.5
A549	Drug metabolism and toxicity studies.	120 h	97%	2.2
HeLa	Biomedical research including Covid-19 vaccine research	72 h	81%	1.9

Table 2. Cell lines tested during CellShip® development

Quality Assurance

CellShip® undergoes stringent Quality Assurance Testing to ensure that the product is sterile and functional. Complete results are reported on the Certificate of Analysis supplied with each batch.

References

Emma Buick, Andrew Mead, Abeer Alhubaysh, Patricia Bou Assi, Parijat Das, James Dayus, Mark Turner, Lukasz Kowalski, Jenny Murray, Derek Renshaw, and Sebastien Farnaud.

[CellShip: An Ambient Temperature Transport and Short-Term Storage Medium for Mammalian Cell Cultures](#), Biopreservation and Biobanking. 28 Dec 2023

<https://doi.org/10.1089/bio.2023.0100>

