

# Cryopreservation of Organoids

Cell Freezing Media



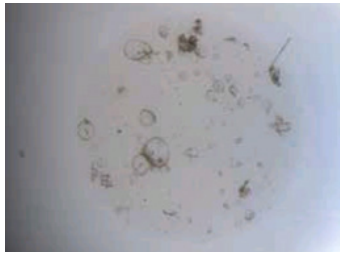
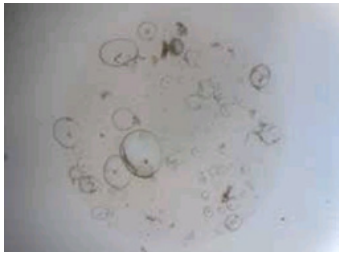
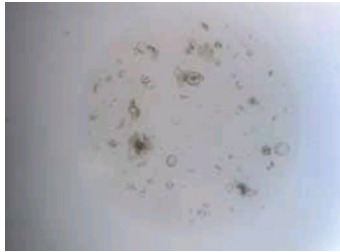
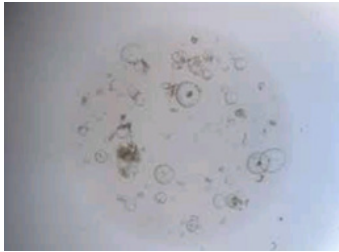


BANK YOUR  
LIBRARIES

High viability  
GMP grade  
Xeno free

# ORGANOID CRYOPRESERVATION

- Useful for drug sensitivity assays
- Maintains genetic information
- Share libraries easily
- Expand tractable cell line availability
- CRISPR compatible

## HUMAN LIVER ORGANOIDS STORED IN CELLBANKER® SERIES

	Day 2	Day 4	Organoid Growth Following Freezing
STEM-CELLBANKER® GMP grade			✓
CELLBANKER® 2			✓
CELLBANKER® 1			✓

*Images courtesy of Robert Arnes, Huch Lab*

“ Day 2 and day 4 images clearly show that organoids recovered and grew well in these three CELLBANKER® freezing media ”

-Meri Huch, Gurdon Institute, Cambridge, UK

# CELLBANKER® CELL FREEZING MEDIA

- Consistently high cell viability post thaw (>90%)
- No programmed freezer or liquid nitrogen required
- Long shelf life
- Tested on many cell types
- Freeze directly in -80°C freezer
- Allows viable long term cell storage > 10 years at -80°C or -196°C
- Ready-to-use formulas avoid mixing of DMSO and filtration

## CELLBANKER® 1



CELLBANKER® 1 is a ready-to-use serum containing cell cryopreservation medium designed for a broad spectrum of mammalian cells. This unique formulation allows for stable cryopreservation and high viability after freeze-thaw cycles, even for sensitive cells.

CELLBANKER® 2 is a serum-free cell cryopreservation medium optimised for serum-free cultured cells and peptide/protein expressing cells. CELLBANKER® 2 offers a low cost-animal free cryopreservation media for all applications where risks of contamination must be avoided.

## CELLBANKER® 2



### Typical cell recovery rates for CELLBANKER® 1 and 2

Cell Type	Preservation Period (year)	Viability of cells (%) at -80°C
Fibroblasts	5	90
Caco-2	5	90
K562	5	90
Jurkat	10	90

## STEM-CELLBANKER® GMP grade

Available DMSO Free



STEM-CELLBANKER® is a chemically defined freezing media optimized for stem cells and iPS cells storage, as well as fragile primary cells. Furthermore, recent data supports its ability to cryopreserve organoids and tissues to allow the recovery of viable cells.

STEM-CELLBANKER® GMP grade is manufactured in compliance with JPN, EU, US, and PIC/S GMP guidelines. Free from animal derived components, and contains only chemically defined USP, EP and JP grade ingredients.

A Drug Master File for STEM-CELLBANKER® has been registered with the Food and Drug Administration (FDA) (MF# 15785).

Available in both DMSO containing and DMSO-Free formulations, STEM-CELLBANKER® is an optimal freezing solution for basic research and in the clinical application of cell therapy products.

## HSC-BANKER®



HSC-BANKER® is an optimized GMP grade cryopreservation medium for hematopoietic stem cells.

Studies show that the HSC-BANKER® is at least equivalent to conventional protocols using DMSO and DEXTRAN.

The results (shown below) of a comparative study on the cryopreservation of hematopoietic stem cells was performed by the Cord Blood Bank of the Japanese Red Cross Society.

New Release

## Featured References


- Neoplasia 2018 Jan 20:25-31  
Determinants for Effective ALECSAT Immunotherapy Treatment on Autologous Patient-Derived Glioblastoma Stem Cells.
- Cryobiology 2017 Oct 78:70-79  
Effect of cryopreservation on viability and growth efficiency of stromal-epithelial cells derived from neonatal human thymus
- Cell & Gene Therapy Insights 2017 July 433-441  
The review of a select number of the latest innovations projected to drive successful commercialization of cell therapy products.
- Nature Methods 2017 May 14:743-751  
Fused cerebral organoids model interactions between brain regions.
- Stem Cell Research & Therapy 2016 Jan 12;7:8  
Biological impact of xeno-free chemically defined cryopreservation medium on amniotic epithelial cells.

Description	Pack Size	Catalogue No.
CELLBANKER® 1 - Serum containing	20 ml	11889
CELLBANKER® 1 - Serum containing	100 ml	11888
CELLBANKER® 2 - Serum free	20 ml	11892
CELLBANKER® 2 - Serum free	100 ml	11891
STEM-CELLBANKER® - GMP	20 ml	11897
STEM-CELLBANKER® - GMP	100 ml	11890
STEM-CELLBANKER® - GMP - DMSO - Free	20 ml	11897F
STEM-CELLBANKER® - GMP - DMSO - Free	100 ml	11890F
HSC-BANKER® - GMP	15ml	11900
CELLOTION® Cell Wash Solution	100ml	11898

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