

## For Cancer Research

# JCRB cell lines with FUJIFILM Wako culture and freezing media

Cells are alive and require continuous culture and passing for their maintenance. However, long-term cell culture is costly, time-consuming and carries the risk not only of contamination with bacteria or other cell lines and interruption of culture due to equipment failure, but also of changes in the inherent characteristics of the cell line, such as cell morphology, growth potential and sensitivity to bioactive substances. Cell preservation method is one of important technologies in the field of cell therapy to protect cells from these risks and reduce the cost.

FUJIFILM Wako provides distinctive JCRB cell line products, culture, and cryopreservation media products.

## JCRB Cell Line products

JCRB (Japanese Collection of Research Bioresources) provides one of the most comprehensive cell banks in the world for pure and applied science, spanning many fields of research across the globe.

We have teamed up with the National Institute of Biomedical Innovation to bring you access to over 1,600 cell lines as the exclusive provider of JCRB's comprehensive catalog of cell lines.



### ■ Most popular JCRB cell line products

JCRB No.	Cell-Line name	Profile
<b>JCRB0403</b>	HuH-7	Well differentiated human hepatocellular carcinoma cell line.
<b>IFO50041</b>	MBT2	Bladder carcinoma
<b>JCRB0834</b>	NUGC-4	Stomach adenocarcinoma, poorly differentiated, signet ring cell carcinoma
<b>JCRB0098</b>	KURAMOCHI	Ovarian undifferentiated carcinoma, ascites
<b>JCRB1020</b>	RERF-LC-Ad1	Human lung cancer cell line, adenocarcinoma.
<b>JCRB1043</b>	OVISe	Human cell line derived from ovarian tumor.

## Applications of JCRB cell line

### ■ Toxicology and Drug Screening

Tumor spheroid models derived from JCRB0134 (MCF-7) cell lines maybe used as valuable models for toxicology and drug discovery. They retain their genome over time and can be used to perform drug screening and facilitate patient specific drug development.

### ■ Benefit of Variety of Ethnic Background in Patient Targeted Cancer Therapies

A more representative panel of JCRB cell lines might improve success rate of identifying useful therapeutics with the cell culture models in terms of the ethnic and gender diversity of cell culture model systems to avoid failures of cancer drugs used to treat a diverse human population.

## Cell culture and freezing media for JCRB cell line products

### BAMBANKER® Medium series

BAMBANKER™ is a serum-free medium for long-term freezing at -80°C and preservation of valuable culture cells such as tumor cells and normal cells.

Since it does not contain serum, there is little difference between Lot due to serum components and no risk of unknown serum-derived components or infectious agents affecting the cells.

BAMBANKER™ Direct is improved operability. It doesn't require centrifugation for cell collecting.



### Applications

Comparison of Bambanker® with other relevant products.

■ BAMBANKER®(GC LYMPHOTEC) ■ Serum Medium with Serum (Company A) ■ Serum-Free Medium (Company A)

#### P3U1 (mouse myeloma cell line)

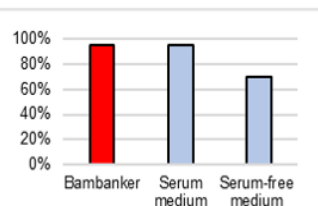
Storage Period 1 year

BamBanker® 95%

Serum Medium 95%

Serum-Free Medium 70%

Cell Number/vial  $2.0 \times 10^6$



#### human γδT cells

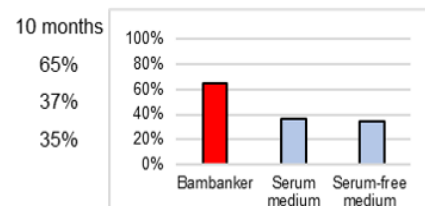
Storage Period 10 months

BamBanker® 65%

Serum Medium 37%

Serum-Free Medium 35%

Cell Number/vial  $1.0 \times 10^6$



#### K562 (human leukemia cell line)

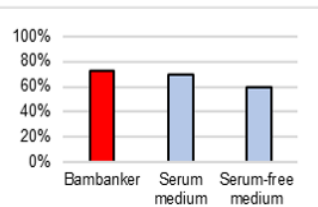
Storage Period 1 year

BamBanker® 73%

Serum Medium 70%

Serum-Free Medium 60%

Cell Number/vial  $3.0 \times 10^6$



#### human B cell line

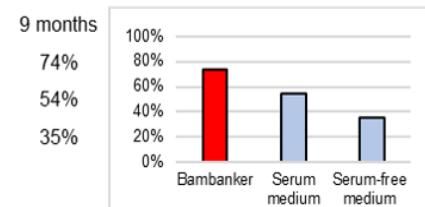
Storage Period 9 months

BamBanker® 74%

Serum Medium 54%

Serum-Free Medium 35%

Cell Number/vial  $1.0 \times 10^6$



#### OKT4 (mouse hybridoma)

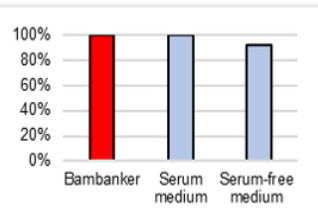
Storage Period 1 year

BamBanker® 100%

Serum Medium 100%

Serum-Free Medium 92%

Cell Number/vial  $1.3 \times 10^6$



#### PC12 (rat-derived adrenal pheochromocytoma)

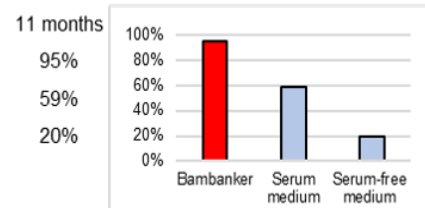
Storage Period 11 months

BamBanker® 95%

Serum Medium 59%

Serum-Free Medium 20%

Cell Number/vial  $1.0 \times 10^6$



#### Daudi (human B cell line)

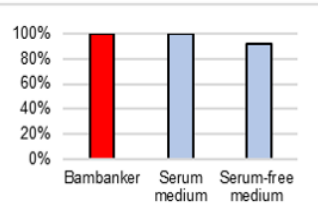
Storage Period 1 year

BamBanker® 100%

Serum Medium 100%

Serum-Free Medium 92%

Cell Number/vial  $9.2 \times 10^5$



#### Monkey B cell line

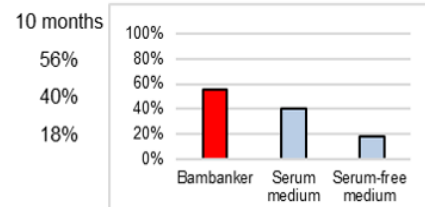
Storage Period 10 months

BamBanker® 56%

Serum Medium 40%

Serum-Free Medium 18%

Cell Number/vial  $1.0 \times 10^6$



#### Human gastric epithelial cells

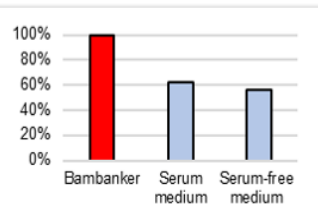
Storage Period 10 months

BamBanker® 100%

Serum Medium 62%

Serum-Free Medium 56%

Cell Number/vial  $1.0 \times 10^6$



## ■ Product List

Product#	Name	Size
302-14686	BAMBANKER®	100 mL
306-14684		20mL X 5
306-95921	BAMBANKER® Direct	20mL

## Cancer Cell Culturing Media

F-PDO is a patient-derived tumor organoids (PDOs) established by Fukushima Translational Research Project, a series of novel PDOs were recently created from different types of tumor tissue, including human lung, ovarian and uterine tumor tissues, among others at present. This product can be used for culturing F-POD, and it confirms that the PDOs can be cultured for more than 6 months using the media with this product, and form cell clusters with similar morphologies to their source tumors even after prolonged growth under culture conditions. Therefore, similar functions are expected in the culture of cancer cell lines.

Product#	Name	Size
638-61961	CCEMp supplement (Cancer Cell Expansion Media plus supplement)	10mL

## ■ Distribution & Inquiries

• JCRB Cell Bank is testing the cell lines for viruses pathogenic to humans as extensive as possible. However, there is the problem of detection limit, and it is practically impossible to examine "all pathogens" as well as unidentified viruses. Therefore, the cell line should be handled as potentially biohazardous materials. Practically, the handling in accordance to biosafety level 2 is recommended. This does not mean that the cell line produces BSL-2 pathogens but is needed to avoid potential risk.

• If you have questions regarding availability, the order process, the shipping calendar, or cancellations, please contact us and we'll help you get the answers you need.

Listed products are intended for laboratory research use only, and not to be used for drug, food or human use. / Please visit FUJIFILM Wako Laboratory Chemicals site: <https://labchem-wako.fujifilm.com/> / This leaflet may contain products that cannot be exported to your country due to regulations. / Bulk quote requests for some products are welcomed. Please contact us.

**FUJIFILM Wako Laboratory Chemicals site**  
<https://labchem-wako.fujifilm.com>



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