

## Customers product feedback

**Product name :** Bambanker HRM (BBH01)

Serum-free cryopreservation solution for regenerative medicine research

**Application:** Comparison of cryopreservation efficiency on human acute myeloid leukemia cell lines

We were kindly allowed to publish the following feedback of Kaneda Kazuko from the University of Miyazaki, Faculty of Medicine, Laboratory of Biochemistry and Molecular Biology, (now Osaka University Graduate School of Medicine), Japan.

### Experimental method

The cryopreservation efficiency of Bambanker HRM and a home-brewed solution (containing 10% DMSO/FCS) were tested on three cell lines of human acute myeloid leukemia cells (Kasumi3, MOLM1, USCD/AML1), which were cultured in our laboratory.

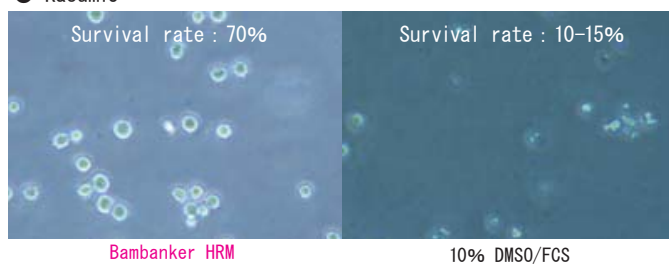
Freezing method	Preservation solution	Characteristics
Slow method	Bambanker HRM	Serum free, <b>Xeno-free</b>
Slow method	home-brewed	10% DMSO/FCS

### Experimental conditions

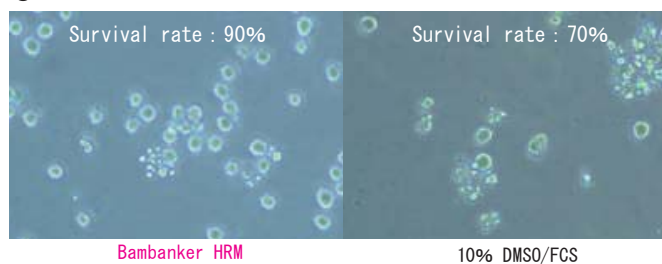
- Used cells :**
- Kasumi3 cell line (Culture medium composition : 10% FCS, 1% P/S, RPMI1640)  
(Obtained from National Institute of Biomedical Innovation)  
<http://www.dsmz.de/catalogues/details/culture/ACC-714.html>
  - MOLM1 cell line (Cluture medium composition : 20% FCS, 1% P/S, RPMI1640)  
(Obtained from Hayashibara Institute)  
<http://www.dsmz.de/catalogues/details/culture/ACC-720.html>
  - USCD/AML1 cell line (Culture medium composition : 10% FCS, 1% P/S, 10ng/mL GM-CSF, RPMI1640)  
(Gift from the University of California, San Diego)  
[http://old.dsmz.de/human\\_and\\_animal\\_cell\\_lines/info.php?dsmz\\_nr=691&from=cell\\_line\\_index&firstload=1](http://old.dsmz.de/human_and_animal_cell_lines/info.php?dsmz_nr=691&from=cell_line_index&firstload=1)
- Cryopreserved cell amount :** 5×10<sup>6</sup> cells/vial, each cell culture was suspended in cryopreservation solution volume of 1 ml.
- Storage temperature :** -80 °C – One day stored in a pre-cooled Bicell bio freezing vessel (Nihon Freezer Co. Ltd.), afterwards moved to a cryotube box.
- Freezing period :** One week
- Thawing method:** Thawed by a conventional method. Viability of the cells was proved after 24 h.

### Results

#### ● Kasumi3



#### ● MOLM1



#### ● USCD/AML1



The survival rate of all three cell lines increased by using Bambanker HRM. In particular for the Kasumi3 cell lines, the survival rate was highly increased by using Bambanker HRM.

#### <Customers comment>

In comparison of home-brewed preservation solution, using Bambanker HRM led to a significant improvement of survival rate of all three examined cell lines. Variation in the viability data was caused by the serum lot to lot variability contained in the home-brewed solution. In contrast, Bambanker HRM is serum free. Thus the viability variation is prevented by not being dependent on serum lots. Hence, we have got constant and high viability data. If you should have problems with your human cell lines, I recommend to use Bambanker HRM.