

Feedback from customers

Product Name : **Bambanker (CS-02-001)**
 Manufacturer : **LYMPHOTEC Inc**
 Application : **Mouse Embryonic Stem(ES) cells preservation**

This feedback has come from the generosity of Dr.Ahn from Tokyo Institute of Technology Graduate School of Bioscience and Biotechnology Department of Biomolecular Engineering Tagawa Laboratory.

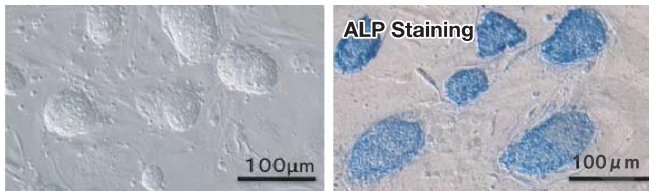
This data is about mouse ES cells preserved in Bambanker.

Conditions

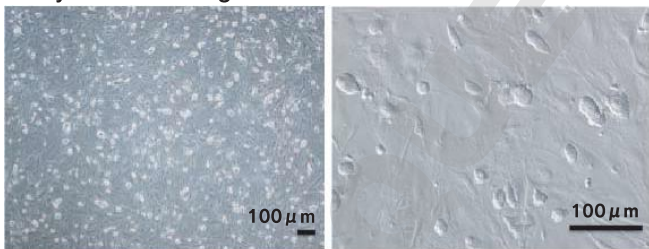
- Cultivation** : 15% FBS/DMEM(1 mM of Sodium pyruvate · 100 μ M of NEAA · 100 μ M of β -ME · 1000 U/ml of LIF) was used as culture media.
 Mouse Embryonic Fibroblast (MEF) was used as feeder cells.
- Freeze** : Cells were frozen in five vials / 60 mm dish (3.0×10^6 cells/vial). 1 ml/vial of Bambanker was directly frozen at -80°C and then kept frozen in liquid nitrogen the following day (Slow freezing method).
- Thawing** : The cells in the vials were melted at 37°C and then cells were suspended in cooled culture media.
 After collecting the cells, they were seeded in 6 well plates and 6 cm dishes.

Results

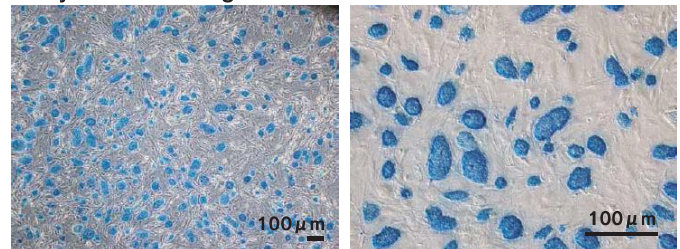
Before freezing



2 days after thawing



3 days after thawing



Through ALP Staining, we confirmed that the cells had been kept undifferentiated.

Preservation of mouse ES cells in Bambanker was successful. The cells had been kept undifferentiated even after freeze and thawing, and no change in the cells' condition was observed.

Comments :

We had used 10% DMSO/ES cell culture media as cryopreservation solution.
 When we tried using Bambanker for the first time, we were successful in reducing time to prepare cryopreservation solution.
 Moreover, the number of dead cells decreased even after freezing and thawing compared to our conventional method.
 No abnormality was observed in undifferentiated condition of mouse ES cells.
 It seems that Bambanker is suitable for cryopreservation of mouse ES cells in terms of usability and cost-efficiency.