

Datasheet

Cryopan II

Chemically Defined Freezing Medium

| Product | Description | Catalogue-No. | Size |
|------------|---|---------------|--------|
| Cryopan II | Chemically defined and protein free freezing medium, with 10 % DMSO | P07-93010 | 10 ml |
| | | P07-93050 | 50 ml |
| | | P07-93100 | 100 ml |
| | | P07-93500 | 500 ml |

Product description

Cryopan II is a serum-free and protein-free freezing medium that is suitable for the cryopreservation of various cell types, including both primary and established cell lines. Its chemically defined composition, free from human or animal components, ensures optimal cell preservation. Cryopan II can be used for freezing adherent and suspension cells, making it a versatile option for the cryopreservation of animal and human cells across different cell types and culture conditions.

Storage conditions

Storage conditions: - 20°C
 Stability: 2 years from date of production
 Filling: 10 ml, 50 ml, 100 ml, 500 ml, other sizes on request

Composition

Cryopan II consists of a chemically defined and optimized mixture of salts, sugar, 10 % DMSO and additional antifreeze-substances. It contains no animal and human components.

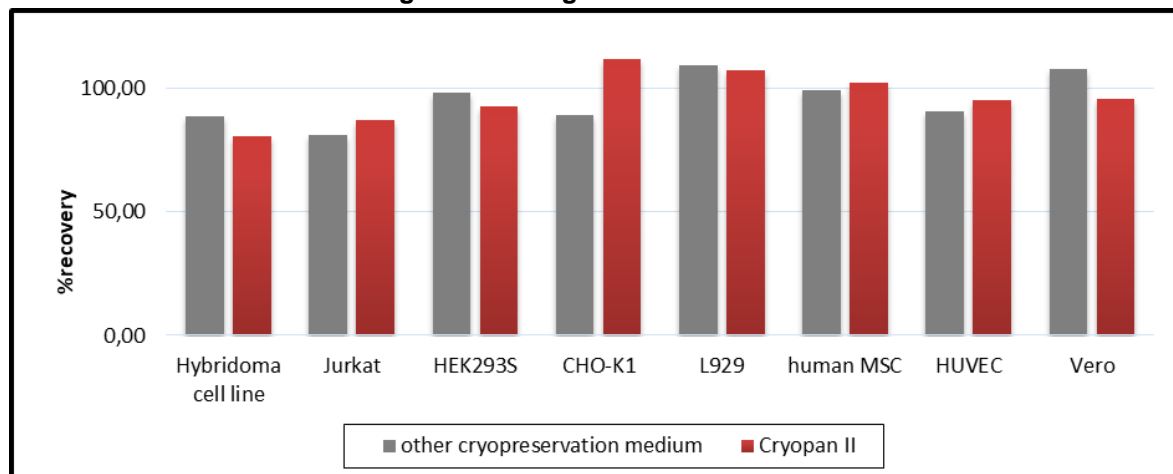
Suitability

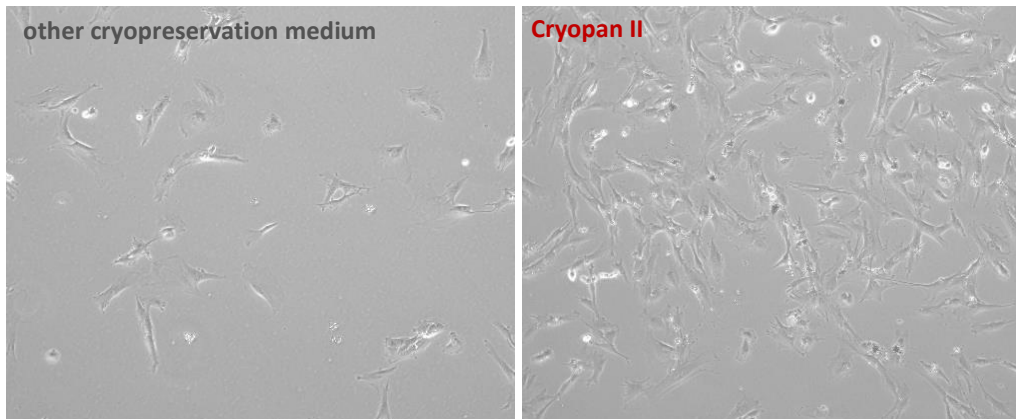
Cryopan II is suitable for the cryopreservation of human and animal cell lines and primary cells.

Special Advantages

The serum-free formulation of Cryopan II makes it particularly well-suited for preserving serum-free cultured cells. The optimized composition of the product ensures a high level of cell viability following the thawing procedure.

Survival Rate in % after freezing and thawing cells





Primary MSC in other cryopreservation medium (left) and in **Cryopan II** (right) 3 days after thawing.

Instructions for Use

Store the cryotubes in a cryotank filled with liquid nitrogen.

Freezing cells with Cryopan II

In order to achieve optimal results, it is recommended to use only viable cells in the logarithmic growth phase.

- Thaw Cryopan and store it at 2-8°C till using.
- For adherent cells, trypsinize and transfer them into the culture medium, followed by inactivation of trypsin activity using a trypsin inhibitor. Centrifuge the cells (100 - 200 g, 5 - 10 minutes).
- Discard the supernatant and wash the cell pellet in PBS (without Ca²⁺/Mg²⁺).
- After an additional centrifugation step, transfer the cells into PBS and determine the cell number and cell viability using trypan blue cell viability staining.
- Centrifuge the cells again and discard the supernatant.
- Transfer the cells into the cold Cryopan (5x10⁵ - 2x10⁶ cells/ml Cryopan).
- Carefully suspend the cells by gently mixing the suspension through repeated pipetting until there are no more cell clumps.
- Refill the cell suspension into labeled cryotubes (0.5 – 1.5 ml per tube).
- Freeze the cells using an automatically or manually controlled cryo freezer. The optimal freezing rate is approximately 1°C per minute.
- Alternatively, place the tubes in a refrigerator for 15 minutes, allowing the freezing medium to penetrate into the cells. After this step, freeze the tubes at -20°C for 2 hours and then transfer them into the vapor phases of liquid nitrogen overnight.
- Store the cryotubes in a cryotank filled with liquid nitrogen.

Thawing cells

- Remove the cryotubes from the cryotank and promptly thaw them in warm water (not more than 2 minutes).
- Disinfect the exterior of the cryotubes using alcohol and, under sterile conditions, transfer the cells to a centrifuge tube.
- Add 10 ml of growth medium dropwise to the tube, ensuring careful mixing.
- Centrifuge the cells (150 - 200 g, 5 - 10 minutes).
- Discard the supernatant and resuspend the cells in the designated culture medium.
- Evaluate cell viability using a suitable methodology, such as FACS or trypan blue cell viability staining.

Technical support

For technical support, questions or remarks please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email (info@pan-biotech.com) or phone +49-8543-601630.

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