

Serum-free cell cryopreservation solution

Product Numbers: DIB803-50mL

Product specifications: 50ml

Product introduction:

Serum-free rapid cell cryopreservation solution is a newly developed protective solution for rapid cryopreservation of cells. It does not contain animal-derived serum components. It can effectively improve the survival rate and rejuvenation of cells and reduce various viruses and molds. Contamination with mycoplasma, etc., to ensure the safety of cryopreserved cells. It is not only suitable for the freezing of general cultured cells, but also for the freezing of serum-free cultured cells and protein expressing cells. The advantages of cryopreserved cell lines are as follows: 1. No animal-derived serum components and clear chemical components. 2. Quick freezing, can be directly placed in the refrigerator at -80°C , 3. Reduce gene drift; 4. Slow down the senescence of cell lines; 5. Stabilize phenotype; 6. Reduce microbial contamination and cross-contamination opportunities. Minimize the formation of crystals in the cell, reduce the low temperature damage to the cells caused by the high concentration of solute formed by the solidification of the water in the cell, and improve the survival rate of the cell during recovery. The number of cryopreserved cells should ensure that the cryoprotectant is diluted 1:10 to 1:20 during resuscitation. The diluted cell concentration should be higher than the cell concentration of the normal passage. This is because when the cryoprotectant is diluted 10-20 After doubling, this concentration generally does not cause toxic damage to cells. The product is mainly composed of culture medium without serum and DMSO. It is a classic aseptic cryopreservation solution. Used for cryopreservation of various mammalian primary cells, passage cell lines, hybridoma cells, etc.

Product composition: Serum-free cell cryopreservation solution 50mL/150 yuan

Storage: 4°C storage for 3 months; -20°C 24months

Self-provided materials: cell counter/cell cryotube/ultra-low temperature refrigerator or liquid nitrogen/ultra-clean workbench

Operation steps (for reference only):

1. Cultivate the cells to the late logarithmic growth period, observe their appearance, morphology, and contamination with a microscope, and take the cells in good condition for cryopreservation. For adherent growth cells, digest with trypsin and stop the digestion with complete medium for cell count; for suspension cells, perform cell count.
2. Centrifuge at $500\sim 1000\text{g}$ for 5min, and remove the supernatant culture solution.
3. Add an appropriate amount of general-purpose cell cryopreservation solution, resuspend the cells to make the cell concentration reach $1\sim 5\times 10^6/\text{ml}$, divide the cell suspension with cryopreservation solution into the cryopreservation tube, airtight, do not twist Too tight to avoid bending deformation.
4. Generally follow the rate of $1^{\circ}\text{C}/\text{min}$ for freezing. It can also be stored in a refrigerator at 4°C for 20min, -20°C 30min, -80°C overnight, and finally stored in a liquid nitrogen tank.

Precautions:

1. Pay attention to aseptic operation in the ultra-clean workbench to avoid contamination as much as possible.
2. Please choose logarithmic growth phase cells for cryopreservation
3. After the freezing solution is added to the cells, please put it in the -80°C refrigerator as soon as possible;
4. If you need to freeze the cells for a long time, please transfer to a liquid nitrogen tank for storage
5. It can be stored at 4°C for 1 month after the first use and thawing, but the number of repeated freezing and thawing should be reduced to avoid invalidation.
6. When hybridoma cells are cryopreserved, they should be resuscitated regularly to check the cell viability and the stability of secreted antibodies.
7. For safety and health, please wear laboratory clothes and disposable gloves for operation.