Video Article

CoolCell - Controlled Cell Freezing w/o Alcohol or Maintenance Cost - ADVERTISEMENT

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Abstract

CoolCell, an alcohol free cell freezing container, is a novel tool for the improvement of cell cryopreservation and recovery. It provides the most precise controlled rate of cooling of -1°C per minute for freezing a large variety of cells (e.g. PBMCs, primary cells, cell lines, stem cells, tissue cells). The radially symmetric design and solid thermal core ensures that each of the 12 samples cools at the same rate, eliminating variations in freezing profiles between samples and yielding better cell viability. Unlike conventional freezing methods, CoolCell uses no alcohol and vastly simplifies the cell freezing process. Alcohol free cell freezing means no freezing variability, no maintenance, no hazardous waste and lower cost while yielding similar or better cell viability and function. Having about one third of the thermal mass of alcohol freezing containers, CoolCell also significantly reduces the heat load in your -80°C freezer. This protects the surrounding freezer space from excess warming that can degrade archived sample stability. CoolCell may be handled comfortably after freezing because the insulated container will not chill your hands like alcohol filled containers. Finally, the lid will not freeze stuck and transfer of tubes for cryogenic storage is quick and easy. In summary, CoolCell excels at ensuring consistent, carefree, and maintenance free controlled freezing and is the first significant breakthrough in simple, cost effective cell freezing since alcohol filled containers. For more information and data, please click here.

Video Link

The video component of this article can be found at http://www.jove.com/video/1929/