Technical Data Sheet

CryoELITE® Cryogenic Vials Shelf Packs

#61807-61808

Introduction

CryoELITE® Cryogenic plastic vials are intended for cryo preservation of human analytical samples for IVD use.

Recommended Safety Gear: Insulated gloves, face shield, lab coat to protect from explosions.

Freezing

Cooling rates control the size of the ice crystals and the rate at which they are formed, both of which affect cell recovery. In most cases, in order to maximize cell recovery of samples, a slow, uniform cooling rate of -1°C per minute from ambient is recommended. This can be accomplished by placing the vials in a -80°C freezer for 2-3 hours (which is close to decreasing sample temperature by 1°C per minute) and works well for a wide range of cell types.

Storage

The temperature at which frozen cells are stored will affect their viability. Storage at -80°C may permit slow chemical reactions from small amounts of unfrozen water, resulting in cell death. Therefore, most cell lines should be stored at temperatures less than -150°C.

Note: CryoELITE® Cryogenic Vials are recommended for use in the vapor phase of liquid nitrogen.

CAUTION: Storage of CryoELITE® Cryogenic Vials in liquid phase should be at your own risk. Storage in the liquid phase may lead to the explosion of the cryogenic vial and/or the release of infectious substances.

Thawing

In contrast to freezing, rapid thawing of cells is needed to maintain viability. When removing vials from the freezer, insulated gloves should be worn to protect you from burns from the low temperatures. The vials are designed with a superior seal, but wearing a face shield and laboratory coat help to protect against explosions is highly recommended.

Directly after removal from storage, vials should be thawed in a 37°C water bath. As the last ice crystals melt, remove the vial from the water. Wipe. Spray, or submerse the vial with 70% ethanol before opening it in a bio-safety hood.

Proper Use of CryoELITE® Cryogenic Vials

Note: Observe your institutional safety guidelines.

1. Remove plastic contents bag from cardboard over pack.
2. Identify and record lot number into laboratory notebook.
3. Before opening in a bio-safety hood: wipe, spray plastic contents bag with 70% ethanol.
4. Open bag under a bio-safety hood and remove vials as needed without placing hands inside the bag.
5. Remove cap of vial with one hand while dispensing desired contents in the other hand.
6. To ensure proper seal, do not fill cryogenic vial past appropriate working volume limit.
7. Once dispensing is complete, immediately re-seal using the cap in hand. Make certain to apply screw cap hand-tight.
8. Place vial into a rack, freezer box or storage box.
9. Repeat as necessary.