

Human tissue cryopreservation with Cryostor

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October 9th, 2016

Materials

Surgical forceps and scissors
RPMI medium (ex. Cell Gro cat# 10-040-CV)
PBS (ex. HyClone, SH30028.02)
CryoStor CS10 (BioLife Solutions, #210102), store at 4°C.
Mr. Frosty

Before tissue arrives:

- Prepare 5% FBS/RPMI. Add: 285 mL RPMI + 15 mL Fetal Bovine serum (FBS).
- Place Mr. Frosty at 4C.

Upon retrieval of the tissue:

1. Transfer specimen in PBS on ice.
2. In culture hood, lay the tissue on a petri dish.
3. ***If tissue sample > 1cm in diameter, use scissors to cut tissue into fragments of 5 mM fragments in the petri dish. If tissue <1 cm in diameter, proceed directly into cryopreservation (Step 4).
4. Place tissue fragments into cryovials, place up to 4 fragments of the same sample into each vial. Add 1mL chilled Cryostor (Cryostor that has been kept at 4°C).
5. Invert cryovials several times to ensure tissue fragments are mixed with CS10
6. Place cryovials into a Mr. Freezy (which has been chilled to 4°C for at least 10 min).
7. Place Mr. Freezy into a 4°C fridge for 10min.
8. Place Mr. Freezy into -80°C freezer.
9. ***NEXT DAY*** Place cryovials into a liquid nitrogen tank for storage.