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Protocol for cryopreservation of fHDF/TERT166 cells

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Reagents

Trypsin-EDTA (Gibco, Cat# 25300054)

Freezing medium which contains:

- DMEM/Ham's F12 (1:1) (Biochrom, Cat# F4815)
- 10 % Fetal Bovine Serum (FBS) (Sigma-Aldrich, Cat# F7524)
- 10 % DMSO

Storage temperature: liquid nitrogen

FibroUp ready-to-use medium (Evercyte, Cat# MHT-008) which contains:

- DMEM/Ham's F-12 (1:1) (Biochrom, Cat# F4815)
- 10 % Fetal bovine serum (FBS) (Sigma-Aldrich, Cat# F7524)
- 2 mM GlutaMAXTM-I (Gibco, Cat# 35050-038)
- 100 μg/ml G418 (InvivoGen, Cat# ant-gn5)

Ethanol, 70 %

Practical application

Freezing of cells:

Detach cells from culture vessel by using Trypsin-EDTA as described in Evercyte's protocol for in vitro propagation of fHDF/TERT166 cells, resuspend detached cells in growth medium and centrifuge at 170 g for 5 min. Then, discard the supernatant, resuspend the cell pellet in the remaining droplet and add freezing medium (4°C) to reach a cell density of about 5×10^5 cells/ml (for thawing in a 25 cm^2 culture flask). Add 1 ml of this cell suspension to each pre-cooled cryovial and immediately transfer the cells to -80°C. After 24 hours transfer the vials to liquid nitrogen.

Thawing of cells:

Add 6 ml of cultivation medium to a 25 cm² culture flask and place the culture flask in the incubator for at least 30 min to allow the medium to reach its normal pH. Take a vial of frozen cells, rinse outside with ethanol and pre-warm in hand until one last piece of frozen cells is seen. Then, immediately transfer the content of the vial to a 15 ml centrifugation tube pre-filled with 9 ml of medium (pre-cooled to 4°C) and centrifuge for 5 min at 170 g. Then, discard the supernatant and resuspend the cells in the remaining droplet. Add 1 ml of medium (pre-warmed to 37°C), transfer to the prepared culture flask and incubate at 37°C in a suitable incubator.

Related products

• FibroUp ready-to-use medium, 500 ml (Evercyte, Cat# MHT-008)