

## Protocol for cryopreservation of HDF/TERT164

Version: August 2023

Evercyte Ord. No.:	CHT-008-0164
Designation:	HDF/TERT164, human fibroblasts
Freezing medium:	DMEM/Ham's F12 1:1 (PAN Biotech, Cat# P04-41150) 10 % FBS (PAN-Biotech, Cat# P30-3031) 10 % DMSO (Sigma-Aldrich, Cat# D2650)  Preparation of 10 ml freezing medium, prepare just before use: <ul style="list-style-type: none"><li>- take 8 ml of DMEM/Ham's F12 (1:1) and transfer to 15 ml centrifugation tube</li><li>- add 1 ml of FBS</li><li>- add 1 ml of DMSO</li><li>- mix properly and store at 4°C</li></ul>
Additional reagents:	PBS (Sigma-Aldrich, Cat# D8537, ready-to-use, stored at RT) 0.05 % Trypsin-EDTA (Gibco, Cat#25300-054, ready-to-use, stored at 4°C after thawing)
Freezing cells:	<ul style="list-style-type: none"><li>- detach the cells from the culture vessel by using 0.05 % Trypsin-EDTA solution as described in protocol <i>Passaging of HDF/TERT164</i> cells</li><li>- resuspend the detached cells in growth medium and centrifuge at 170 g for 5 min</li><li>- discard the supernatant</li><li>- resuspend the resulting cell pellet in the remaining droplet</li><li>- add freezing medium (tempered to 4°C) to reach a cell density of about <math>5 \times 10^5</math> cells/ml (for thawing in a 25 cm<sup>2</sup> culture flask)</li><li>- add 1 ml of this cell suspension to each pre-cooled cryovial and immediately transfer the cells to -80°C</li><li>- after 24 hours transfer the vials to the liquid nitrogen tank</li></ul>
Thawing cells:	<b>When you start cultivating the cells, please transfer the content of the original Evercyte vial containing HDF/TERT164 cells into a T25 roux flask as described in the following:</b> <ul style="list-style-type: none"><li>- add 6 ml of growth medium to a 25 cm<sup>2</sup> culture flask and place the culture flask in the incubator for at least 30 min to allow the medium to reach 37°C and its normal pH</li><li>- take a vial of frozen cells, rinse it outside with ethanol and pre-warm in the hand until one last piece of frozen cells is seen</li><li>- 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</li><li>- discard the supernatant and resuspend the cell pellet in the remaining droplet</li><li>- add 1 ml of the pre-warmed medium to the cells, transfer the cells to the prepared culture flask and incubate at 37°C in a suitable incubator</li></ul>

- perform a medium change 24 hours after thawing, if the cells are already 80 % confluent at this point, they have to be passaged as described in protocol *Passaging of HDF/TERT164 cells*

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Related products: HDF/TERT164, human fibroblasts, adult (Evercyte, Cat# CHT-008-0164)  
fHDF/TERT166, human fibroblasts, foreskin (Evercyte, Cat# CHT-031-0166)

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