

Protocol for cryopreservation of ASC/TERT1

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Version: January 2023

Evercyte Ord. No.:	CHT-001-0005
Designation:	ASC/TERT1, human mesenchymal stromal cells
Freezing medium:	Growth medium for ASC/TERT1 cells (EGM TM -2, Lonza, see protocol <i>Passaging of ASC/TERT1 cells</i>) 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">- take 8 ml of growth medium and transfer to 15 ml centrifugation tube- add 1 ml of FBS- add 1 ml of DMSO- mix properly and store at 4°C
Additional reagents:	0.05% Trypsin-EDTA (Gibco, Cat# 25300-054, ready-to-use, stored at 4°C) Defined Trypsin Inhibitor (Gibco, Cat# R007100, ready-to-use, stored at 4°C) PBS (Sigma-Aldrich, Cat# D8537, ready-to-use, stored at RT)
Freezing cells:	<ul style="list-style-type: none">- detach the cells from the culture vessel by using Trypsin-EDTA solution as described in protocol <i>Passaging of ASC/TERT1 cells</i>- resuspend the detached cells in growth medium and centrifuge at 170 g for 5 min- discard the supernatant- resuspend the resulting cell pellet in the remaining droplet- add freezing medium (tempered to 4°C) to reach a cell density of about 5×10^5 cells/ml (for thawing in a 25 cm² 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 the liquid nitrogen tank
Thawing cells:	When you start cultivating the cells, please transfer the content of the original Evercyte vial containing ASC/TERT1 cells into a T25 roux flask as described in the following: <ul style="list-style-type: none">- add 6 ml of growth 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 37°C and its normal pH- 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- 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- discard the supernatant and resuspend the cell pellet in the remaining droplet- 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

- perform a medium change 24 hours after thawing, if the cells are already 80 % confluent at this point, they must be passaged as described in protocol *Passaging of ASC/TERT1 cells*

Related products: WJ-MSC/TERT273, human mesenchymal stromal cells (Evercyte, Cat# CHT-021-0273)
