

Protocol for passaging of HDMVEC/TERT164-B

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Evercyte Ord. No.:	CHT-013-0164-B
Designation:	HDMVEC/TERT164-B, human dermal microvascular endothelial cells
Growth medium:	<p>EGM-2 MV Microvascular Endothelial cell Growth Medium-2 BulletKit (Lonza, Cat# CC-3202, w/o GA-1000 / FBS) supplemented with G418 and FBS (see Protocol for <i>preparation of HDMVEC/TERT164-B medium</i>)</p> <ul style="list-style-type: none">- temper the medium to room temperature (not 37°C) before use
Coating:	<p>0.1 % Gelatin solution</p> <p>The coating solution is prepared by mixing the following components: Gelatin (Sigma Aldrich, Cat# G1393, 2 %, stored at 4°C) PBS (Gibco, Cat# 14190-144, ready-to-use, stored at RT)</p> <ul style="list-style-type: none">- liquify the Gelatin solution at 37°C- add 38 ml PBS to 2 ml Gelatin stock solution- mix carefully, store diluted Gelatin solution (0.1 %) in aliquots at 37°C <p>For coating of a T25 roux flask proceed as follows:</p> <ul style="list-style-type: none">- transfer 2 ml of Gelatin solution (0.1 %) to a T25 roux flask (final 80 µl/cm²)- completely wet the surface of the culture flask- incubate the culture flask at 37°C between 10-60 min- remove excess of Gelatin solution- use culture flask immediately for seeding of cells, the surface must not dry out
Additional reagents:	<p>0.05 % Trypsin-EDTA (Gibco, Cat# 25300-054) Defined Trypsin Inhibitor (Gibco, Cat# R007100) PBS (Gibco, Cat# 14190-144)</p>
Passaging of cells:	<ul style="list-style-type: none">- remove and discard the culture medium- wash the cells twice with PBS (each 160 µl/cm²), remove PBS completely- add Trypsin-EDTA solution (20 µl/cm²), make sure that all cells have been in contact with this solution- incubate the culture flask at 37°C for approximately 3 min- observe cell detachment under an inverted microscope- as soon as all cells are detached (if necessary, agitate the cells by gently hitting the flask), add Defined Trypsin Inhibitor (20 µl/cm²)- resuspend the cells in growth medium (about 160 µl/cm²) and aspirate the cells by pipetting

- centrifuge at 170 g for 5 min
- discard the supernatant, resuspend the cell pellet in the remaining droplet and add growth medium
- transfer appropriate aliquots of the cell suspension to Gelatin pre-coated culture vessels supplemented with growth medium (final volume of 240 μ l/cm²)
- a split ratio of 1:2 twice a week is recommended (after having reached about 90 %)
- perform a medium change after 2-3 days if cells have not reached required cell density
- cultivate cells at 37°C in a humidified atmosphere with 5 % CO₂

Related products: HUVEC/TERT2, umbilical vein endothelial cells (Evercyte, Cat# CHT-006-0008)
