

Neonatal Human Epidermal Keratinocytes

Product sheet, catalog n° CTICC.1.2.2

General Information

- Organism: Human (Homo sapiens)
- Tissue: Skin
- Cell Type: Skin keratinocytes from single donor
- Location: Foreskin or other part (see Certificate of Analysis)
- Gender: Male or Female (see Certificate of Analysis)
- Age: 0-1Y (see Certificate of Analysis)
- Phototype: (see Certificate of Analysis)

Cell Characteristics

- Cell properties: Adherent
- Morphology: Polygonal Cobblestone-shaped
- Isolation: Enzymatic dissociation
- Cell passage: P0 to P2 (see Certificate of Analysis)
- Minimum number of population doublings: 10
- Cell viability: Minimum 70% viability when thawed from cryopreservation
- Cell conditioning: Supplied as vials of 1M cells
- Cryopreservation medium: Frozen with 90% serum-free cryopreservation medium + 10% DMSO
- Storage condition: Liquid nitrogen
- Batch specific information: (see Certificate of Analysis)

Safety and Quality Control

- Biosafety level: 1
- **Contamination**: Use mandatory laboratory protections and handle with care tissues and cells derived from human samples to avoid any contamination of the operator
- Viral testing: negative for HIV, HBV, HCV
- Sterility testing: Negative for mycoplasma, bacteria and yeasts

Handling upon delivery and storage

- Check that the containers are intact and free of damage
- If cells are not used immediately, place the vials at -150°C or below upon delivery

Growth medium

• Recommended medium reference: CTIGM.Kerat: Growth Medium for Keratinocytes





- 1 Add 0.12 ml per cm² of medium to the culture vessel (Recommended: 9mL in T75 flask)
- 2 Add 13 ml of PBS solution to a 15 ml conical tube, and warm in a water bath to 37 $^\circ\text{C}$
- 3 Thaw cryovial by swirling in a water bath at 37 °C. As soon as the content has thawed, start step 4
- 4 Once thawed, add the cell suspension to the warmed PBS in sterile conditions
- 5 Spin the tube at 250 g for 7 minutes to pellet the cells
- 6 Resuspend the cells in the appropriate volume of recommended medium
- 7 Seed the cells in the culture vessel at a concentration of 5 000 to 10 000 cells per cm²
- 7 Incubate at 37°C, 5% CO2 atmosphere, 95% humidity
- 8 After 24 hours of incubation, change the medium to remove any debris
- 9 Continue to incubate and change the medium every 3-4 days

Subculturing

- 1- Start subculturing when cells reached 80%-90% confluence
- 2 Preheat TrypLE (non-toxic for cell trypsin substitute) and recommended medium.
- 3 Remove the medium from the flask
- 4 Wash the cells quickly with PBS without Ca2+ Mg2+
- 5 Add 0.06 mL per cm² of TrypLE for 10-12 min at 37 °C in the incubator

6 - Remove the cells from the flask by pipetting several times and wash the flask with recommended medium for remaining cells

- 7 Centrifuge the cells in recommended medium at 250 g for 7 minutes to pellet the cells
- 8 Remove the supernatant and resuspend the pellet in recommended medium
- 9 Seed the cells in the culture vessel at a concentration of 5 000 cells per cm²
- 10 Incubate at 37 °C, 5% CO2 atmosphere, 95% humidity
- 11 After 24 hours of incubation, change half of the medium to remove any debris
- 12 Continue to incubate and change the medium every 3-4 days

Associated products

- CTICC.1.1.2: Neonatal Human Dermal Fibroblasts, Cryopreserved, 10⁶ cells
- CTICC.1.3.2: Neonatal Human Melanocytes, Cryopreserved, 10⁶ cells
- SKIN BIOPSIES: Fresh, Flash Frozen, FFPE, OCT-embedded

Provisions

- Cells and tissues are intended for **research use only** and shall not be used for human trials, animal trials, or diagnostics.
- **Consent**: the original tissues have been obtained after informed consent of the patient under the provisions required by French Law.
- Primary Human cells are not immortalised cell lines and may not be continually subcultured.