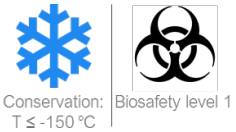
Juvenile Human Epidermal Keratinocytes

Product sheet, catalog n° CTICC.1.2.3

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**: 1-17 years (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

Thawing and culturing procedure for frozen cells

1 - Add 0.12 ml per cm² of medium to the culture vessel (Recommended: 9 mL in T75 flask)
2 - Add 13 ml of PBS solution to a 15 ml conical tube, and warm in a water bath to 37 ˚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 0.06mL 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

- CTIGM.Kerat : Growth Medium for Keratinocytes
- CTICC.1.1: Human Dermal Fibroblasts, Cryopreserved, 10^6 cells
- CTICC.1.3: Human Melanocytes, Cryopreserved, 10^6 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.