

HaCaT | 300493

Description

HaCaT is a cell line derived from a 56-year-old male patient with actinic keratosis. It is a spontaneously immortalized, non-tumorigenic, anchorage-dependent cell line that grows in culture as a monolayer of cells. HaCaT cells are characterized by their high proliferative capacity and their ability to differentiate into various cell types, including keratinocytes, fibroblasts, and melanocytes. They are widely used in research on skin biology, drug testing, and toxicology.

Organism *Homo sapiens*

Tissue Skin

Age 62

Gender Male

Ethnicity German

Cell type Epithelial cells, 20-25 passages

Growth properties Adherent

Citation HaCaT (ATCC CCL-23) Cytion 300493

Biosafety level 1

NCBI_TaxID 9606

CellosaurusAccession CVCL_0038

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Tumorigenic

Karyotype ()

Culture Medium DMEM, w: 4.5 / w: 4 - w: 3.7 / NaHCO₃, w: 1.0

Supplements FBS 10%

Dissociation Reagent 1:1 EDTA (0.05%) (0.1%)

Doubling time HaCaT 28

- Subculturing**
1. :
 2. : (PBS) 3-5 T25 5-1
 3. : EDTA 0.05% 1-2 T25 2.5
 4. : 37°C 10
 5. **Trypsin/EDTA** **TrypLE Express: Solution** trypsin/EDTA (0.05% 1 T25 2.5 T75 (3 4 TrypLE Express
 6. 1-5
 7. : (FBS)
 8. :

Split ratio A ratio of 1:5 to 1:10 is recommended

Seeding density 1×10^4 /

Fluid renewal 2

Freeze medium (FBS) + 10% DMSO

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Thawing and Culturing Cells

1. [REDACTED]
2. [REDACTED] cryovial [REDACTED] -150 [REDACTED]
3. [REDACTED] 37°C [REDACTED]
4. [REDACTED] 70% [REDACTED]
5. [REDACTED] 15 [REDACTED]
6. [REDACTED] 300 x g [REDACTED] 3 [REDACTED]
7. [REDACTED] 10 [REDACTED]
8. [REDACTED]

Incubation Atmosphere 37°C, 5% CO₂, [REDACTED]

Flask Coating [REDACTED]

Freezing Procedure [REDACTED]

Shipping Conditions [REDACTED]

Storage Conditions [REDACTED] -150 [REDACTED] -196 °C [REDACTED]

/ / HLA

Sterility [REDACTED] PCR [REDACTED]
[REDACTED]

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STR

- Amelogenin:** x,x
- CSF1PO:** 9,11
- D13S317:** 10,12
- D16S539:** 9,12
- D5S818:** 12
- D7S820:** 9,11
- TH01:** 09. Mrz
- TPOX:** 11,12
- vWA:** 16,17
- D3S1358:** 16
- D21S11:** 28,30.2
- D18S51:** 12
- Penta E:** 7,12
- Penta D:** 11,13
- D8S1179:** 14
- FGA:** 24
- D1S1656:** 11,12
- D2S1338:** 17,25
- D12S391:** 18,23
- D19S433:** 13,14

HLA

- A*:** '31:01:02
- B*:** '40:01:02, '51:01:01
- C*:** '03:04:01, '15:02:01
- DRB1*:** '04:01:01, '15:01:01
- DQA1*:** '01:02:01, '03:03:01
- DQB1*:** '03:01:01, '06:02:01
- DPB1*:** '03:01:01, '04:01:01
- E:** '01:03:01, '01:03:02