

HaCaT | 300493

Key features

Description

HaCaT is a human epidermal keratinocyte cell line, derived from a 45-year-old male patient with a squamous cell carcinoma. The cells are immortalized by transfection with SV40 large T antigen and are characterized by their ability to form a stratified epithelium in culture. HaCaT cells express a wide range of keratins and other epidermal markers, making them a valuable model for studying skin biology and drug testing.

Organism Human

Tissue Skin

Characteristics

Age 62 years

Gender Male

Ethnicity Caucasian

Cell type Epithelial cells, 20-25 passages

Growth properties Adherent

References

Citation HaCaT (ATCC CCL-23) | Cytion 300493

Biosafety level 1

NCBI_TaxID 9606

CellosaurusAccession CVCL_0038

Additional information

Product sheet

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Tumorigenic

Karyotype ()

XXXXXXXX

Culture Medium DMEM, w: 4.5 g/L , w: 4 mM L-, w: 3.7 g/L NaHCO₃, w: 1.0 mM (Cytion 82030a)

Supplements 10% FBS

Dissociation Reagent 1:1 EDTA (0.05%) (0.1%) PBS /EDTA.

Doubling time HaCaT 28

- Subculturing**
- - (PBS) T25, 5-10 T75,
 - EDTA 0.05% 1-2 T25 2.5
 - 37°C 10
 - /EDTA /EDTA (0.05% , 0.025% EDTA) TrypLE Express.) 3-4 TrypLE Express.)
 - 1-5
 - (FBS)
 -

Seeding density 1 x 10⁴

Fluid renewal

Freeze medium (FBS) + 10% DMSO

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Thawing and Culturing Cells

1. Thaw the vial quickly in a 37°C water bath. Transfer the cells to a pre-warmed medium.
2. Centrifuge at 300 x g for 3 minutes. Remove the supernatant and wash the cells with PBS. Resuspend in fresh medium.
3. Seed the cells into a pre-warmed flask. Incubate at 37°C in 5% CO₂.
4. Once cells reach 70% confluency, passage them.
5. Seed cells into a 15 cm² flask or an 8 cm² flask.
6. Seed at 300 x g for 3 minutes. Wash with PBS. Resuspend in fresh medium.
7. Seed into a 10 cm² flask. Incubate at 37°C in 5% CO₂.
8. Once cells reach 70% confluency, passage them.

Incubation Atmosphere 37°C, 5% CO₂, humidified

Flask Coating No

Freezing Procedure Freeze cells in a freezing medium and store at -80°C.

Shipping Conditions Ship cells at -80°C.

Storage Conditions Store cells at -150°C for up to 196 days.

Genotype / HLA

Sterility

PCR genotyping confirmed.

Freeze cells in a freezing medium.

XXXX HaCaT | 300493

XXXXXX 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