HFF-hTERT clone #6 (HFFc6) growth conditions

Growth Media (500 ml)

- 400 ml Dulbecco's Modified Eagle's Medium (DMEM)
- 100 ml Heat-inactivated FBS (20%)
- No antibiotics

Culture Conditions

Atmosphere (37°C):

- air, 95%;
- carbon dioxide (CO₂), 5%



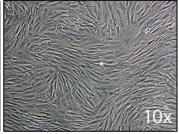


Figure 1: ~90% confluency

Figure 2: Overgrown

Thawing initial stock

Initial stock vial contains $0.5-1.0 \times 10^6$ viable cells. Thaw the vial quickly in a 37°C water bath, transfer the contents to a 15 ml conical tube containing 5 ml of warm media, spin (250xg for 5 min at room temp.), remove the supernatant and resuspend the pellet in 5 ml media. Plate all the cells into one T25 flask or equivalent area (at 10^4 cells/cm² minimum).

Sub-culturing

HFFc6 cells¹ are split when they are ~90% (*Figure 1*) confluent (~every 2-3 days at a 1:4 dilution)
Please take pictures after thawing and from the first 90% confluent sub-culture. Cells should not overgrow the plate.
Overgrown cultures will have elongated cells growing in "waves" (*Figure 2*).

Procedure

Before doing the subculture, media and Accutase® are placed at room temperature or at 37°C before using it on the cells

- 1. Remove and discard culture medium.
- 2. Briefly rinse the cell layer with 1X DPBS
- 3. Add 1.5mL mL of Accutase® solution to T75 flask and incubate for 2-3 minutes.
- 4. Add 8.5 mL of complete growth medium and rinse surface of the flask to detach all cells. Gently pipetting up and down to re-suspend the cells.
- 5. Add 2.5 mL of the cell suspension to a new T75 and complete with media.
- 6. Place flasks in incubator at 37°C with a 5% CO₂ in air atmosphere.

Flask/plate	Number of cells seeded	Number of cells at confluency
T25	2.5 x10 ⁵	1.0 x10 ⁶
T75	7.5 x10 ⁵	3.0 x10 ⁶
10 cm Ø	7.8 x10 ⁵	3.1 x10 ⁶
15 cm Ø	1.8 x10 ⁶	7.5 x10 ⁶

Freezing/thawing

• Cells can be frozen using Bambanker solution (see manufacturer's instructions)

Ordering info

- DMEM: high glucose, GlutaMAX™ Supplement, pyruvate, (Fisher Scientific: #10569010
- Heat-inactivated FBS (Premium grade US origin, 500 ML, HI [Seradigm AB through VWR, item: 97068-091, Quote:8030223666, reserve: 8003216852, Lot: 035B15])
- Accutase (StemPro® Accutase® Cell Dissociation Reagent, Fisher Scientific: #A1110501)
- DPBS (Fisher Scientific: #14190144)
- Bambanker cell freezing solution (Fisher Scientific/ Wako Chemicals USA, Inc.: 30214681)

¹ HFFc6 is a subclone of HFF-hTERT [MOLECULAR AND CELLULAR BIOLOGY, Apr. 2004, p. 2842–2852]