

Product sheet

MC3T3-E1 | 305187

MC3T3-E1

Description MC3T3-E1 is a mouse fibroblast cell line derived from the connective tissue of the tail of a C57BL/6 mouse. It is a clonal cell line that has been widely used in research on cell growth, differentiation, and cancer. MC3T3-E1 cells are characterized by their ability to form colonies and their sensitivity to various growth factors and signaling molecules.

Organism Mouse

Tissue Skin, Connective tissue

Applications Cell culture, Differentiation studies, Wound healing assays

Synonyms Mc3T3-E1, MC3T3E1, MC-3T3-E1, MC 3T3-E1

MC3T3-E1

Breed/Subspecies C57BL/6

Age 3-6 weeks

Gender Male

Morphology Fibroblast

Cell type Fibroblast

Growth properties Adherent

MC3T3-E1

Citation MC3T3-E1 (ATCC CRL-2539) | Cytion 305187

Biosafety level 1

NCBI_TaxID 10090

CellSaurusAccession CVCL_0409

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XXXXXXXXXX XXXX-XXXXXXXXXXXXXXXXXX

Tumorigenic XX, XXXXXXXX XX XXXX XXXXXXXX

Products XXXXXX

XXXXXXXXXX

Culture Medium XXXX MEM, w: 2.0 mM XXXXXXXX XXXXX, w: XXXXXXXXXXXXXXXXXXXXXXX, w: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX, w: 1.0 mM XXXXXXXX XXXXX, w: 2.2g/L N

Supplements XXXXX XXXXXX 10% FBS

Dissociation Reagent XXXXXXXX

Doubling time 24 ~ 48 XXXXX

Subculturing XXXX XX XXXXXXXX XXXXX XXXXXXXX XXXXXXXX XXXXXXX XXXXX X-PBS XXX XXXXX XXXXXXXX XXXXX XXXXXXXX T25, XXXXXXX X-3-5 X' X-PBS, XXXXXXX XXX
3 XXXXX. XXXXX XX XXXXXXXX XXXXXXXX, XXXXXXX XX XXXXXXXX XXXXXXXX XXXXXXX XXX XXXXXXX XXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXX.

Fluid renewal 2 ~ 3 XXXXXXX XXXXXXX

Freeze medium XXXXXXX XXXXXXXX XXXXXXXX, XXXX XXXXXXXX XXXXXXXX XXXXXXX XXXX (XXXXX FBS) + 10% DMSO XXXX XXXXXXXX XXXXXXXX XXXXXXX XXXXX XXXXXXXX, XXX C

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Thawing and Culturing Cells

1. Thaw the cells in a water bath at 37°C. Transfer the cells to a 15 mL centrifuge tube and centrifuge at 300 x g for 3 minutes. Remove the supernatant and resuspend the cells in 10 mL of DMEM supplemented with 10% FBS. Incubate the cells for 24 hours to allow them to attach to the flask.
2. After 24 hours, remove the FBS and replace it with DMEM supplemented with 10% FBS. Incubate the cells for 24 hours.
3. After 24 hours, remove the FBS and replace it with DMEM supplemented with 10% FBS. Incubate the cells for 24 hours.
4. After 24 hours, remove the FBS and replace it with DMEM supplemented with 10% FBS. Incubate the cells for 24 hours.
5. After 24 hours, remove the FBS and replace it with DMEM supplemented with 10% FBS. Incubate the cells for 24 hours.
6. After 24 hours, remove the FBS and replace it with DMEM supplemented with 10% FBS. Incubate the cells for 24 hours.
7. After 24 hours, remove the FBS and replace it with DMEM supplemented with 10% FBS. Incubate the cells for 24 hours.
8. After 24 hours, remove the FBS and replace it with DMEM supplemented with 10% FBS. Incubate the cells for 24 hours.

Incubation Atmosphere 37°C, 5% CO₂, humidified air

Flask Coating None

Freezing Procedure Harvest cells into a 15 mL centrifuge tube and centrifuge at 300 x g for 3 minutes. Remove the supernatant and resuspend the cells in 1 mL of DMEM supplemented with 10% FBS. Add 10% DMSO and freeze the cells in a freezing container at -80°C.

Shipping Conditions Cells should be shipped in a freezing container at -80°C.

Storage Conditions Cells should be stored in a freezing container at -150°C for up to 196 days.

Genotype / HLA

Sterility Cells are tested for mycoplasma contamination using PCR. Cells are also tested for endotoxin contamination using a Limulus amoebocyte lysate (LAL) assay.