

**MC3T3-E1 | 305187**

**DESCRIPTION**

**Description** MC3T3-E1 is a mouse fibroblast cell line derived from the connective tissue of a mouse. It is characterized by its ability to form colonies in culture and its use in various biological assays, including wound healing and osteogenic differentiation. MC3T3-E1 cells are widely used in research to study cell growth, differentiation, and the effects of various treatments on cell behavior.

**Organism** Mouse

**Tissue** Skin

**Applications** Cell culture, wound healing, osteogenic differentiation

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

**CHARACTERISTICS**

**Breed/Subspecies** C57BL/6

**Age** 1 month

**Gender** Male

**Morphology** Fibroblast

**Cell type** Fibroblast

**Growth properties** Adherent

**REFERENCES**

**Citation** MC3T3-E1 (ATCC CRL-2522) (305187)

**Biosafety level** 1

**NCBI\_TaxID** 10090

**CellosaurusAccession** CVCL\_0409

Product sheet

XXXXXXXX MC3T3-E1 | 305187

XXXXXXXXXX XXXXXXXXXXXX XXXXXXXXXXXX

**Tumorigenic** XXXX XX XXXXXXXX XXXX XXXXX XX XXX XXXXXXXX

**Products** XXXXXXXXXXXX

XXXXXXXXXX

**Culture Medium** Alpha MEM 2.0 XXXX XXXXX XXXXXXXXXXXX XXXXXXXX X XXXXXXXXXXXXXXXXXXXXXXXX X XXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXX 1.0 XXXX XXXXX XXXXXXXX

**Supplements** XX XXXXXXXX XXXXXXXX X 10% XX XX FBS

**Dissociation Reagent** XXXXXXXX

**Doubling time** XX 24 XX 48 XXXXX

**Subculturing** XX XXXXXXXX XXXXXXXX XXXXXXXX XX XXXXXXXX XXXXXXXXXXXX XXXXXXXXXXXX XXXXXXXXXXXX PBS XXXXX XXXXXXXX XX XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX

**Fluid renewal** 2 XX 3 XXXXX XX XXXXXXXX

**Freeze medium** XXXXXXXX XXXXXXXX XXXXXXXXXXXXXXXX XXXXXXXX XXX XX XXXXX (XXXX XX XXX FBS) + 10% DMSO XX XXX XXXXXXXX XXX XXXXXXXX XXXXXXXX XXX XXXXXXXX XXXXXXXX

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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. Seed the cells into a T75 flask.
2. Incubate the cells in a humidified CO2 incubator at 37°C until they reach 70-80% confluency.
3. Wash the cells with PBS and trypsinize them. Seed the cells into a T75 flask with DMEM supplemented with 10% FBS.
4. Incubate the cells until they reach 70-80% confluency.
5. Wash the cells with PBS and trypsinize them. Seed the cells into a T75 flask with DMEM supplemented with 10% FBS.
6. Incubate the cells until they reach 70-80% confluency.
7. Wash the cells with PBS and trypsinize them. Seed the cells into a T75 flask with DMEM supplemented with 10% FBS.
8. Incubate the cells until they reach 70-80% confluency.

**Incubation Atmosphere** 37 °C, 5% CO2

**Flask Coating** Non-adherent

**Freezing Procedure** Harvest cells and resuspend in DMEM + 10% FBS. Seed into a T75 flask until 70-80% confluent.

**Shipping Conditions** Cells should be shipped at 4°C.

**Storage Conditions** Cells can be stored at -150 to -196 °C.

**MC3T3-E1 / MC3T3-E1 / HLA**

**Sterility** Cells are provided as a sterile suspension.