

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 extensively studied and is widely used in research on cell growth, differentiation, and cancer biology. 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 1-2 weeks

Gender Male

Morphology Fibroblast

Cell type Fibroblast

Growth properties Adherent

MC3T3-E1

Citation MC3T3-E1 (ATCC CCL-3) | Cytion 305187

Biosafety level 1

NCBI_TaxID 10090

CellosaurusAccession CVCL_0409

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Thawing and Culturing Cells

1. Thaw the vial quickly in a water bath at 37°C, and transfer the cells to a pre-warmed medium.
2. Centrifuge the cells at 300 x g for 3 minutes at 4°C, and resuspend the cells in 15 ml of pre-warmed medium.
3. Seed the cells into a 75 cm² flask containing 37 ml of pre-warmed medium.
4. Incubate the cells in a humidified atmosphere of 5% CO₂ at 37°C.
5. Once the cells have reached confluence, they can be used for experiments.
6. For passaging, trypsinize the cells and seed them into a new flask.
7. The cells should be passaged every 2-3 weeks to maintain optimal growth.
8. Store the cells in liquid nitrogen for long-term storage.

Incubation Atmosphere 37°C, 5% CO₂, humidified

Flask Coating Adhesion-promoting coating, e.g. fibronectin

Freezing Procedure Harvest cells and resuspend in freezing medium, store at -80°C

Shipping Conditions Store at -80°C

Storage Conditions Store at -150°C for 196 weeks

Genotype / Phenotype / HLA

Sterility Sterility tested by PCR, negative result