Product description

The CMT 93 cell line was isolated from a 19-month-old male mouse (C57BL/1CRF a^t) which received an intraperitoneal injection of methyl azoxymethanol acetate (MAMA) each week for 18 months to induce tumour formation. The cell line was established from the fourth in vivo passage, serving as the source for explant culture. CMT 93 cells exhibit epithelial characteristics, forming acini and junctional complexes in vitro. When inoculated into nude mice (6×10^6 cells), they produce large tumours within approximately one month, demonstrating their robust tumorigenic potential.

Name: CMT 93 Cell Line

Disease: Cancer

Cancer: Colorectal cancer

Cancer detailed: Murine colorectal carcinoma

Organism: Mouse

Gender: Male

Tissue: Rectum

Model: Tumour line

Growth properties: Adherent

Morphology: Epithelial, closely packed, varying in size, grows in clumps

CRISPR Edited: No

Production details: CMT 93 was established from a fourth in-vivo transplant generation of a rectal carcinoma.

Cellosaurus id: CVCL_1986

Contributor(s)

Institute: Cancer Research UK, London Research Institute: Lincoln's Inn Fields

Properties

Product format: Frozen

Unpacking and storage:

1. Check all containers for leakage or breakage.
2. Remove the frozen cells from the dry ice packaging and immediately place the cells at a temperature below -130°C, preferably in liquid nitrogen vapor, until ready for use.

Recommended medium: DMEM with 2mM Glutamine and 10% FCS.

Subculture: Split sub-confluent cultures (70-80%) 1:4 to 1:10 seeding at approximately 1-3 x 10^4 cells/cm² using 0.25% trypsin; 5% CO_2; 37°C.

Culture conditions: 37.0°C ± 1.0°C incubator with 5.0% ± 1.0% CO_2.

Handling instructions

1. Please ensure that vials are frozen when received, and store at **<-130 °C long term**. When removing frozen cells from storage, it is important to minimize exposure to room temperature (15 - 25°C). If not proceeding directly to thawing, place the cells on dry ice or in a liquid nitrogen container.
2. **Do not thaw at room temperature.** To thaw, swirl the vial quickly in a 37 °C water bath with O-ring and cap above the water to avoid contamination. Remove from the water bath with a small ice pellet remaining (this should not take more than 2 minutes) and wipe the exterior with 70% ethanol or isopropanol before transferring to a biosafety cabinet. Further steps should be conducted under aseptic conditions.
3. We strongly recommend that the volume of cell suspension is measured at this point, and a 20 uL aliquot be removed for a **viable cell count** using trypan blue or similar dye. This ensures that provided cells are viable, and the cell count can be used to determine volume of growth medium to be added to the cell suspension.
4. Transfer the cell suspension into a 15 mL sterile conical tube containing 5 mL of pre-warmed, complete growth medium. Centrifuge cells at **125xg for 5-7 minutes**.
5. Aspirate the supernatant without disturbing the cell pellet. Re-suspend the cell pellet in the recommended pre-warmed, complete growth medium and dispense into a culture flask.

References

- Franks and Hemmings. 1978. J Pathol. 124(1):35-8. PMID: 722371.

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: CMT 93 Cell Line, was invented at Cancer Research UK, London Research Institute: Lincoln's Inn Fields (CancerTools.org #152752).