Product description

CMT 167 is a highly metastatic murine alveogenic lung carcinoma cell line, derived from the parental CMT 64 line. Developed in 1984 at the Cancer Research UK London Research Institute (Lincoln's Inn Fields), CMT 167 was established through subcloning and *in vivo* selection for enhanced metastatic potential from pooled lung metastases of CMT 64. Compared to CMT 64, CMT 167 exhibits a markedly higher propensity for metastasis and is a useful tool to investigate the mechanisms and origins of metastatic progression in lung cancer.

Name: CMT 167 Cell Line

Disease: Cancer

Cancer type: Lung cancer

Organism: Mouse

Gender: Female

Tissue: Lung

Model: Cancer cell line

Morphology: Epithelial cell line, with closely packed sheets at confluence.

Growth properties: Adherent

CRISPR Edited: No

Production details: CMT 167 is a subclone of the CMT 64 alveogenic lung carcinoma cell line, originally derived from a primary tumour in a C57BL/1CRF mouse. To generate CMT 167, adult female C57B/T mice (aged 4–6 months) were subcutaneously injected in the lower right flank using a Bashford needle. The injected material consisted of pooled tumour fragments taken from various non-necrotic regions of CMT 64-derived tumours. Following tumour development, cells were harvested from resulting lung metastases. Epithelial outgrowths from these metastatic sites were cultured and selectively expanded based on their high metastatic potential. Through this process of subcloning and *in vivo* screening, the CMT 167 cell line was established as a more aggressively metastatic variant of CMT 64.

Cellosaurus id: CVCL_2405

Contributor(s)

Inventor(s): Peter Riddle
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 3 x 10^4 cells/cm² using 0.05% trypsin or trypsin/EDTA; 5% CO_2; 37°C. Saturation density 1.2 x 10^5 cells/cm².

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

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Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: CMT 167 Cell Line, was invented by Peter Riddle at Cancer Research UK, London Research Institute: Lincoln's Inn Fields (CancerTools.org #151448).