
Product description

Human bladder transitional cell carcinoma cell line characterised by high E-cadherin expression and strong epithelial adhesion properties. Demonstrates limited invasive capacity under standard conditions, with invasion significantly enhanced by E-Cadherin disruption (via antibodies). A slow growing tumour which does not form colonies in soft agar. Tumourigenic in nude mice, RT112/84 cells possess a low plating efficiency requiring 400 cells/dish to form any colonies.

Name: RT112/84 cell line

Cancer: Bladder Cancer

Cancers detailed: Human bladder carcinoma epithelial

Organism: Human

Gender: Female

Tissue: Bladder

Growth properties: Adherent

Model: Tumour cell line

Model description:

CRISPR Edited: No

Biosafety level: 1

Cellosaurus id: CVCL_2714

Contributor(s)

Inventor: Chris Marshall

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 vapour, until ready for use.

Recommended medium: EMEM (EBSS) + 2mM Glutamine + 1% Non Essential Amino Acids (NEAA) + 10% Foetal Bovine Serum (FBS).

Sub-culture routine: Split sub-confluent cultures (70-80%) seeding at $2-4 \times 10,000$ cells/cm² using 0.05% trypsin/EDTA; 5% CO₂; 37°C. Subculture weekly - cells are difficult to trypsinize and should be kept sub-

confluent.

Culture conditions: 37.0°C ± 1.0°C incubator with 5.0% ± 1.0% CO₂

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.
1. **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.
2. 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 remaining cell suspension to a centrifuge tube using a pipette.
5. Rinse the vial with 1 mL of medium and add it dropwise to the cells.
6. Wash by adding 15 - 20 mL of medium **dropwise**, while gently swirling the tube.
7. Centrifuge the cell suspension at **1200 rpm for 5 minutes** at room temperature.
8. Carefully remove the supernatant with a pipette, leaving a small amount of medium to ensure the cell pellet is not disturbed. Resuspend the cell pellet by gently flicking the tube.
9. Gently add required volume of FM medium and transfer to a suitable cell culture flask. It is recommended to thaw into a T-25 flask to maintain high density. Once confluent, cells can be plated in a T-75 flask.
10. Examine the cultures after 24 hours and subculture following instructions above.

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:
RT112/84 cell line, was invented by Chris Marshall (CancerTools.org #153250).

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