Product description

The C75 cell line was established from a 56-year-old male patient with a moderately well differentiated adenocarcinoma of the sigmoid colon classified as Dukes' stage D.

Name: C75 Colorectal Adenocarcinoma Cell Line

Cancer: Colorectal cancer

Cancers detailed: Colorectal adenocarcinoma

Organism: Human

Gender: Male

Tissue: Colon

Growth properties: Adherent

Model: Tumour line

CRISPR Edited: No

Biosafety level: 1

Cell type: Epithelial

STR profiling: Amelogenin: X,Y CSF1PO: 12 D5S818: 12 D7S820: 9,11 D13S317: 10,13 D16S539: 8,11 TH01: 8,9.3 TPOX: 10 vWA: 17

Cellosaurus id: CVCL_5248

Contributor(s)

Inventor: Walter Bodmer
Institute: University of Oxford

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: Iscove's Modified Dulbecco's Medium, + 10% Foetal Bovine Serum (FBS) + 2 mM Glutamine

Subculture: Cells grow as small dense islands and will not form a monolayer. C75 cells grow very slowly (see growth curve). Subculture approximately every 5 days. Seed cells at 2-4x10,000 cells/cm² and use 0.05% trypsin

or trypsin/EDTA as a dissociation reagent. Detached cells will often remain in clumps which may be further disaggregated by repeated pipetting of the cells.

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 minimise 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 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 **100 x g 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 culture medium and transfer to a T25 flask or culture dish.
10. Following resuscitation or subculture, the cells take at least 48 hours to re-attach. Cells should be left without disturbance during this time to facilitate adhesion.

References

- Browning et al. 1993. Proc Natl Acad Sci U S A. 90(7):2842-2845. PMID: 8464898.

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: C75 Colorectal Adenocarcinoma Cell Line was invented by Walter Bodmer (CancerTools.org #151758).