Product description

The C106 cell line was established from a 78-year-old female patient with a moderately well differentiated adenocarcinoma of the rectum classified as Dukes' stage A.

Name: C106 colorectal cell line

Organism: Human

Tissue: Colon

Disease: Cancer

Cancer Type: Colorectal cancer

Cancers detailed: Rectal adenocarcinoma

Growth properties: Adherent

Model: Tumour line

Cellosaurus id: CVCL_M011

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 vapor, until ready for use.

Recommended medium: Iscove's Modified Dulbecco's Medium + 10% Fetal Bovine Serum (FBS) + 2 mM Glutamine.

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

Cryopreservation: Freeze in 90% FBS +10% DMSO

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 remaining cell suspension to a 50 mL conical tube using a pipette.
5. Rinse the vial with 1 mL of medium and add it dropwise to the cells, while gently swirling the 50 mL tube.
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 suitable cell culture flask.
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.
11. Subculture conditions: Cells grow as small dense islands and will not form a monolayer. **C106 cells grow very slowly.** This cell line should be sub-cultured approximately every 5-8 days. Seed cells at 4-7x10,000 cells/cm² and use 0.05% trypsin or trypsin/EDTA. Detached cells will often remain in clumps which may be further disaggregated by repeated pipetting of the cells.

References

- Efstathiou et al. 1999. Proc Natl Acad Sci U S A. 96(5):2316-21. PMID: 10051639.

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: C106 colorectal cell line, was invented by Walter Bodmer (CancerTools.org #151762).