Product description

Uveal melanoma is a rare, but deadly, cancer of the eye involving the uvea (iris, ciliary body, or choroid). Tumours arise from melanocytes mostly in the uvea but can also arise from the conjunctiva and other sites within the eye. This cell line was derived from primary choroidal melanomas. This cell line is positive for type VI collagen via IHC.

Name: Human uveal melanoma M619 cell line

Organism: Human

Disease: Eye cancer

Cancers detailed: Uveal melanoma

Tissue: Eye

Growth properties: Adherent

Model: Cancer cell line

Subtype: Primary

Conditional: No

Biosafety level: 1

Cellosaurus id: CVCL_8472

Contributor(s)

Inventor: Karla Daniels
Institute: The University of Iowa

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: RPMI 1640 with 1% insulin-selenium-transferrin, 10mM HEPES, supplemented with 5% heat-inactive FBS, 60 IU/mL Penicillin and 100 IU/mL Streptomycin, and 100mg/L L-Glutamate.

Subculture: Split confluent cultures using Trypsin-EDTA solution; 5% CO2; 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 remaining cell suspension to a centrifuge tube using a pipette.
6. Rinse the vial with 1 mL of medium and add it dropwise to the cells.
7. Wash by adding 15 - 20 mL of medium **dropwise**, while gently swirling the tube.
7. Centrifuge the cell suspension at **250 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.

References

- Folberg et al. 2008. Invest Ophthalmol Vis Sci. 49(11):4697-701. PMID: 18689700.
- Folberg et al. 2007. Invest Ophthalmol Vis Sci. 48(7):2967-74. PMID: 17591861.
- Daniels et al. 1996. Lab Invest. 75(1):55-66. PMID: 8683940.

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner:
Human uveal melanoma M619 cell line was invented by Karla Daniels at The University of Iowa (CancerTools.org #160514).