Product sheet

C918 Cells | 305109

General information

Description	The C918 cell line is derived from human melanoma, specifically a metastatic site in a patient. The line was established to provide a model for studying the biological behavior of melanoma cells, including their growth patterns, metastatic potential, and response to therapeutic agents. Melanoma is a form of skin cancer that arises from melanocytes, the cells responsible for pigment production in the skin, and is known for its aggressive nature and potential to spread rapidly to other parts of the body. C918 cells are characterized by their ability to form tumors when transplanted into immunodeficient mice, making them a valuable tool for in vivo studies of tumor growth and metastasis. In vitro, these cells display a typical melanoma phenotype, including high proliferation rates and resistance to apoptosis. This cell line has also been used to study cell signaling pathways that are relevant to melanoma progression and to screen for potential anti-cancer drugs. Studies using C918 cells can provide insights into the mechanisms underlying melanoma metastasis and resistance to chemotherapy, contributing to the development of more effective treatments for this challenging cancer type.
Organism	Human
Tissue	Choroid
Disease	Uveal melanoma

Characteristics

Age	60 years
Gender	Female
Morphology	Epithelial
Growth properties	Adherent

Identifiers / Biosafety / Citation

Citation	C918 (Cytion catalog number 305109)
Biosafety level	1

Expression / Mutation

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Handling

Culture Medium	RPMI 1640, w: 2.1 mM stable Glutamine, w: 2.0 g/L NaHCO3 (Cytion article number 820700a)
Medium supplements	Supplement the medium with 10% FBS
Passaging solution	Accutase
Subculturing	Remove the old medium from the adherent cells and wash them with PBS that lacks calcium and magnesium. For T25 flasks, use 3-5 ml of PBS, and for T75 flasks, use 5-10 ml. Then, cover the cells completely with Accutase, using 1-2 ml for T25 flasks and 2.5 ml for T75 flasks. Let the cells incubate at room temperature for 8-10 minutes to detach them. After incubation, gently mix the cells with 10 ml of medium to resuspend them, then centrifuge at 300xg for 3 minutes. Discard the supernatant, resuspend the cells in fresh medium, and transfer them into new flasks that already contain fresh medium.
Split ratio	1:2 to 1:4
Fluid renewal	2 to 3 times per week
Freeze medium	CM-1 (Cytion catalog number 800100)

Handling of cryopreserved cultures

1. Confirm that the vial remains deeply frozen upon delivery, as cells are shipped on dry ice to maintain optimal temperatures during transit.
2. Upon receipt, either store the cryovial immediately at temperatures below -150°C to ensure the preservation of cellular integrity, or proceed to step 3 if immediate culturing is required.
3. For immediate culturing, swiftly thaw the vial by immersing it in a 37°C water bath with clean water and an antimicrobial agent, agitating gently for 40-60 seconds until a small ice clump remains.
4. Perform all subsequent steps under sterile conditions in a flow hood, disinfecting the cryovial with 70% ethanol before opening.
5. Carefully open the disinfected vial and transfer the cell suspension into a 15 ml centrifuge tube containing 8 ml of room-temperature culture medium, mixing gently.
6. Centrifuge the mixture at 300 x g for 3 minutes to separate the cells and carefully discard the supernatant containing residual freezing medium.
7. Gently resuspend the cell pellet in 10 ml of fresh culture medium. For adherent cells, divide the suspension between two T25 culture flasks; for suspension cultures, transfer all the medium into one T25 flask to promote effective cell interaction and growth.
8. Adhere to established subculture protocols for continued growth and maintenance of the cell line, ensuring reliable experimental outcomes.

Quality control / Genetic profile / HLA

Sterility

Mycoplasma contamination is excluded using both PCR-based assays and luminescence-based mycoplasma detection methods.

To ensure there is no bacterial, fungal, or yeast contamination, cell cultures are subjected to daily visual inspections.