Product sheet

MH-3924A Cells | 500286

General information

Description	In vitro established from the ACI-rat hepatoma (Cell Lines Service).
Organism	Rat
Tissue	Liver
Disease	Hepatocellular carcinoma
Synonyms	MH 3924A, MH3924A, MH-3924 A, MH 3924 A, 3924A, Morris hepatoma 3924A, MH-3924, MH3924, MH 3924

Characteristics

Age	16 months
Gender	Unspecified
Morphology	Epithelial-like
Growth properties	Adherent

Identifiers / Biosafety / Citation

Citation	MH-3924A (Cytion catalog number 500286)
Biosafety level	1

Expression / Mutation

Tumorigenic	Yes, in ACI-rat
Viruses	RAP-test negative by PCR for: Adenovirus FL, Adenovirus K87, Hantavirus, Kilham rat virus, Lmyfocytair choriomeningitis virus, Mycoplasma pulmonis, Pneumonia virus of mice, Rat corona virus / Sialoacryoadenitis virus, Rat parvo virus, Reovirus type 3, Sendai virus, Theiler-s encephalomyelitis virus, Toolan-s H-1 virus.

Handling

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Culture Medium	DMEM, w: 4.5 g/L Glucose, w: 4 mM L-Glutamine, w: 1.5 g/L NaHCO3, w: 1.0 mM Sodium pyruvate (Cytion article number 820300a)
Medium supplements	Supplement the medium with 10% FBS
Passaging solution	Accutase
Doubling time	25 to 35 hours
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	A ratio of 1:4 to 1:6 is recommended
Seeding density	2 x 10^4 cells/cm^2
Fluid renewal	Every 3 to 5 days
Freezing recovery	Start culture using the complete contents of the cryovial in 2xT25 cell culture flasks. The cells will recover within 24 to 48 hours.
Freeze medium	CM-1 (Cytion catalog number 800100) or CM-ACF (Cytion catalog number 806100)

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. Optionally, skip centrifugation but remove any remaining freezing medium after 24 hours.
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.

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STR profile

Amelogenin: x,x
Rat_D1Wox31: 100
Rat_D2Wox37: 156
Rat_D19Wox11: 228
Rat_D10Wox8: 266,270
Rat_D4Wox7: 141,145
Rat_D2Wox27: 223
Rat_D5Rat33: 120,122
Rat_D10Wox11: 156,159
Rat_D1Wox23: 226,234
Rat_D12Wox1: 410
Rat_D6Wox2: 100,112,120
Rat_D8Wox7: 161,182
Rat_D6Cebr1: 239
SRY: x,x