Product sheet

HMY-1 Cells | 305145

General information

Description	The HMY-1 cell line is a malignant melanoma cell line derived from a human male patient. The melanoma originated on the right sole of the patient and later metastasized to the lymph nodes. The cells exhibit a fibroblast-like morphology, characteristic of melanoma cells adapted for in vitro culture. Initially, the cell line exhibited pigmentation, a common trait in melanomas, but this pigmentation faded as the cell line became established and stabilized over time. Genetically, the HMY-1 cell line has a modal chromosome number of 66, indicating significant chromosomal abnormalities typical of cancer cells. The cell line demonstrates an infinite lifespan in culture, providing a valuable model for long-term studies on melanoma biology, metastasis, and therapeutic interventions. As with other melanoma cell lines, HMY-1 can be utilized for research into the mechanisms of melanoma progression, drug resistance, and the development of novel treatments targeting metastatic cancer cells.
Organism	Human
Tissue	Skin
Disease	Melanoma
Metastatic site	Left inguinal lymph node
Synonyms	HMY1

Characteristics

Age	62 years
Gender	Male
Morphology	Fibroblast
Growth properties	Adherent

Identifiers / Biosafety / Citation

Citation	HMY-1 (Cytion catalog number 305145)
Biosafety level	1

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Expression / Mutation

Tumorigenic	Yes

Handling

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	37 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	1:2 to 1:4
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.

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STR profile

Amelogenin: x,y
CSF1PO: 12
D13S317: 11,13
D16S539: 10
D5S818: 12
D7S820: 11,14
TH01: 6
TPOX: 11
vWA: 17,19
D3S1358: 15
D21S11: 30,32.2
D18S51: 14,17
Penta E: 17,2
Penta D: 14
D8S1179: 14
FGA: 22
D6S1043: 11,13
D2S1338: 19
D12S391: 22,24
D19S433: 14,15.2