

RY(ham) Yoshida Sarcoma Cells | 500415

General information

Description This cell line was established as in vitro cell line from a Yoshida Ascites sarcoma induced in Sprague-Dawley rats.

Organism Rat

Disease Sarcoma

Metastatic site Ascites

Characteristics

Cell type Fibroblast

Growth properties Adherent/suspension

Identifiers / Biosafety / Citation

Citation RY(ham) Yoshida Sarcoma (Cytion catalog number 500415)

Biosafety level 1

Expression / Mutation

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

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Subculturing Gather the suspension cells in a 15 ml tube and gently wash the adherent cells with PBS lacking calcium and magnesium (use 3-5 ml for T25 flasks and 5-10 ml for T75 flasks). Apply Accutase (1-2 ml for T25 flasks, 2.5 ml for T75 flasks) ensuring full coverage of the cell layer. Allow the cells to incubate at room temperature for 10 minutes. Following incubation, combine and centrifuge both the suspension and adherent cells. After centrifugation, carefully resuspend the cell pellet and transfer the cell suspension into new flasks containing fresh medium.

Split ratio A ratio of 1:5 is recommended

Seeding density 1 to 2×10^4 cells/cm²

Freezing recovery After thawing, the cells should be handled at a cell concentration of 5×10^5 cells/ml and allowed to recover for at least 48 hours.

Freeze medium CM-1 (Cytion catalog number 800100) or CM-ACF (Cytion catalog number 806100)

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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 $300 \times g$ 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

Rat_D1Wox31: 100,104
Rat_D2Wox37: 138,150
Rat_D19Wox11: 220,224
Rat_D10Wox8: 266,270
Rat_D4Wox7: 145,149
Rat_D2Wox27: 223
Rat_D5Rat33: 134,144
Rat_D10Wox11: 165
Rat_D1Wox23: 226,230
Rat_D12Wox1: 410
Rat_D6Wox2: 104
Rat_D8Wox7: 185
Rat_D6Cebr1: 223,225
SRY: x,x