Product sheet

AH-130 Cells | 500412

General information

Description	Yoshida et al. have established the ascites hepatoma by converting the aminoazo dyeinduced hepatoma of the rat into the ascetic form (Yoshida 1956). AH-130 is a strain of ascites hepatoma composed of free tumor cells, only small islands of tumor islets are present. The cell line described here was established as in vitro cell culture from this Yoshida AH-130 strain of ascites hepatoma.
Organism	Rat
Tissue	Liver
Disease	Hepatocellular carcinoma
Metastatic site	Ascites
Applications	Hepatocellular carcinoma research; rat liver tumor biology; Yoshida ascites hepatoma model; drug sensitivity and cytotoxicity testing; adenovirus susceptibility studies; preclinical liver cancer modeling in Sprague-Dawley rats; adherent/suspension tumor biology
Synonyms	Yoshida AH-130, Yoshida AH130, AH130, AH 130, AH-130 Yoshida, AH130-TC, AH130/P

Characteristics

Breed/Subspecies	Sprague-Dawley
Age	Age unspecified
Gender	Sex unspecified
Ethnicity	Not applicable (rat cell line; Sprague-Dawley in Q)
Morphology	Round suspension cells, triangular adherent cells
Cell type	Hepatocellular carcinoma cells (hepatocarcinoma)
Growth properties	Adherent/suspension

Regulatory Data

Citation	AH-130 (Cytion catalog number 500412)

AH-130 Cells | 500412

Biosafety level	1
NCBI_TaxID	10116
CellosaurusAccession	CVCL_4367
GMO Status	No genetic modification; transplantable rat ascites hepatoma derived from aminoazo dye-induced primary hepatoma by Yoshida (1956)

Biomolecular Data

Tumorigenic	Yes, in Wistar and other strains.
Viruses	RAP-test negative. .
Virus susceptibility	Highly sensitive to human adenoviruses

Handling

Culture Medium	DMEM:Ham's F12 (1:1), w: 3.1 g/L Glucose, w: 2.5 mM L-Glutamine, w: 15 mM HEPES, w: 0.5 mM Sodium pyruvate, w: 1.2 g/L NaHCO3 (Cytion article number 820400a)
Supplements	Supplement the medium with 10% FBS
Dissociation Reagent	Accutase
Doubling time	approx. 18 to 24 hours (fast growing; BD=Fast confirmed)
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	1 to 3
Seeding density	2×10^4 cells/cm^2

AH-130 Cells | 500412

Fluid renewal	Every 3 to 5 days
Post-Thaw Recovery	Fast
Freeze medium	As a cryopreservation medium, we use complete growth medium (including FBS) + 10% DMSO for adequate post-thaw viability, or CM-1 (Cytion catalog number 800100), which includes optimized osmoprotectants and metabolic stabilizers to enhance recovery and reduce cryo-induced stress.
Thawing and Culturing Cells	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.
Incubation Atmosphere	37°C, 5% CO_2, humidified atmosphere.
Shipping Conditions	Cryopreserved cell lines are shipped on dry ice in validated, insulated packaging with sufficient refrigerant to maintain approximately −78 °C throughout transit. On receipt, inspect the container immediately and transfer vials without delay to appropriate storage.

Storage Conditions	For long-term preservation, place vials in vapor-phase liquid nitrogen at about −150 to −196 °C. Storage at −80 °C is acceptable only as a short interim step before transfer to liquid nitrogen.

Quality Control & Molecular Analysis

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.