Product sheet

Hep-56.1D Cells | 400204

General information

Description	Established from the primary hepatocellular carcinoma of C57BL/6J mice.
Organism	Mouse
Tissue	Liver
Disease	Hepatocellular carcinoma
Synonyms	HEP-56.1D, 56.1D, 56.1d

Characteristics

Age	Adult
Gender	Female
Morphology	Epithelial-like
Growth properties	Adherent

Identifiers / Biosafety / Citation

Citation	Hep-56.1D (Cytion catalog number 400204)
Biosafety level	1

Expression / Mutation

Protein expression	Keratin 8, Keratin 18, Vimentin.
Tumorigenic	Yes, in C57BL/6J mice. In the third week, tumors will develop which are approx. 5-6 mm in diameter.
Ploidy status	Aneuploid
Mutational profile	p53mut, C:G -+ G:C transversion at codon 132 of mouse p53 exon 5, which corresponds to an amino acid change from cysteine to tryptophan.

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	25 to 30 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 1:8 is recommended
Seeding density	1 to 2 x 10^4 cells/cm^2 during routine culture
Fluid renewal	Every 3 to 4 days
Freezing recovery	>90% of the cells recovered from the freezing process within 24 to 48 h
Freeze medium	CM-1 (Cytion catalog number 800100) or CM-ACF (Cytion catalog number 806100)
Handling of cryopreserved cultures	Hep-56.1D cells are shipped in a deep-frozen state on dry ice. Upon receipt, confirm that the vial remains frozen. For storage, place the cryovial immediately at temperatures below -150 degrees. If you plan to culture the cells immediately, swiftly thaw the vial by shaking it in a 37 degrees water bath with clean water and an antimicrobial agent for 40-60 seconds. Remove the vial once a small ice clump persists, ensuring it remains cold. Proceed with all subsequent steps under aseptic conditions. In a sterile flow hood, disinfect the cryovial with 70% ethanol. Then, gently open the vial and transfer the cell suspension into a 15 ml centrifuge tube pre-filled with 8 ml of room temperature culture medium. Gently mix the cells. For cell separation, centrifuge at 300 x g for 3 minutes and dispose of the supernatant. Skipping centrifugation is optional, although any residual freezing medium should be removed after 24 hours. Resuspend the pellet gently in 10 ml of fresh culture medium and divide between two T25 culture flasks. Follow the subculture protocol for subsequent steps.

Quality control / Genetic profile / HLA

Sterility	Mycoplasma contamination is rigorously 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.
STR profile	**M_18-3**: 16 **M_4-2**: 20.3 **M_6-7**: 17 **M_3-2**: 14 **M_19-2**: 13 **M_7-1**: 26.2 **M_1-1**: 16 **M_8-1**: 16 **M_2-1**: 15 **M_15-3**: 22.3 **M_6-4**: 18 **M_11-2**: 16 **M_1-2**: 19 **M_17-2**: 15 **M_12-1**: 17 **M_5-5**: 17 **M_X-1**: 28 **M_13-1**: 17 **Human D4/D8**: -