Product sheet

DSL-6A-C1 Cells | 500166

General information

Description	The DSL-6A/C1 cell line is a pancreatic ductal cell line originally derived from the DSL-6 transplantable acinar cell carcinoma, a tumor established from a primary acinar cell carcinoma of the pancreas in a male Lewis rat. This rat was exposed to azaserine intraperitoneally, leading to the development of the tumor. Initially, upon establishment in culture, DSL-6A/C1 cells retained the capability to produce amylase, a characteristic exocrine enzyme of acinar cells. However, this production ceased within one to two weeks of culture. Over time, as the DSL-6A/C1 cells were maintained in culture and subjected to regrafting experiments, they underwent a notable phenotypic transformation. The cells lost structural and immunohistochemical markers that are typical of acinar cells and instead began expressing markers indicative of ductal cell phenotype. One of the key markers acquired during this transformation is the cystic fibrosis transmembrane regulator (CFTR), which is commonly associated with ductal cells in the pancreas. This shift in marker expression suggests a significant plasticity in the cell line, reflecting changes in cell identity and function that can occur in response to the in vitro environment.
Organism	Rat
Tissue	Pancreas
Disease	Carcinoma, azaserine induced
Metastatic site	Ductal
Synonyms	DSL-6A/C1, DSL6A/C1

Characteristics

Breed/Subspecies	Lewis
Age	2 years
Gender	Male
Morphology	Epithelial-like
Cell type	Acinar cells
Growth properties	Adherent

Regulatory Data

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Citation	DSL-6A-C1 (Cytion catalog number 500166)
Biosafety level	1
NCBI_TaxID	10116
CellosaurusAccession	CVCL_4166

Biomolecular Data

Tumorigenic	Yes, in Lewis rats the cells produce solid tumors composed of ductlike structures surrounded by dense fibrous tissue

Handling

Culture Medium	Waymouth medium (We do not supply this product; please consider other suppliers. Please let us know if you need further assistance)
Supplements	Supplement the medium with 10% FBS, 2.0 mM L-glutamine
Dissociation Reagent	Accutase
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.
Seeding density	1×10^4 cells/cm^2
Fluid renewal	2 times per week
Post-Thaw Recovery	After thawing, plate the cells at 5×10^4 cells/cm^2 and allow the cells to recover from the freezing process and to adhere for at least 24 hours.
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.
Flask Coating	None
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

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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.