Product sheet

LA795 Cells | 300472

General information

Description	The LA795 cell line, derived from a lung adenocarcinoma, has been extensively studied for its chromosomal patterns using G and C banding techniques at passages 60 and 100. The chromosomal analysis revealed model chromosome numbers 69, 68, 67, and 66. Detailed G banding analysis of 46 cells across these four clones indicated that the chromosome patterns of LA795 are hypotetraploid male cells, closely resembling those observed in cells transplanted into mice. The two primary configurations of the 69 model chromosome, designated 69I and 69II, suggest a progression in chromosomal evolution from 69 to 68, 67, and 66 as identified through karyotype analysis. The karyotype analysis also highlighted a notable pattern in the loss of specific chromosomes, specifically chromosome No. 4 and No. 14, across the various clones. This recurrent chromosomal loss indicates a potential non-random chromosomal aberration associated with mouse tumor cells. The findings from these studies provide valuable insights into the chromosomal stability and evolution of the LA795 cell line, offering a deeper understanding of the genetic underpinnings of lung adenocarcinoma and its progression.
Organism	Mouse
Tissue	Lung
Disease	Adenocarcinoma of the mouse pulmonary system
Synonyms	LA-795

Characteristics

Breed/Subspecies	T739
Age	Unspecified
Gender	Male
Growth properties	Adherent

Regulatory Data

Citation	LA795 (Cytion catalog number 300472)
Biosafety level	1
NCBI_TaxID	10090

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CellosaurusAccession	CVCL_G363

Biomolecular Data

Handling

Culture Medium	RPMI 1640, w: 2.0 mM stable Glutamine, w: 2.0 g/L NaHCO3 (Cytion article number 820700a)
Supplements	Supplement the medium with 10% FBS
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.
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.