

Code:	0301
Cell Line:	FaDu
Species:	Homo sapiens
Vulgar Name:	Human
Tissue:	Pharinx
Morphology:	Epithelial
Disease:	Squamous Cell Carcinoma
Growth Properties:	Adherent
Sex:	Male
Age Ethnicity:	56 YEARS OLD; CAUCASIAN
Derivation:	The FaDu line was established in 1968 from a punch biopsy of an hypopharyngeal tumor removed from a Hindu patient
Applications:	This cell line is a suitable transfection host.
DNA Profile:	Amelogenin: None detected CSF1PO: 12 D13S317: 8, 9 D16S539: 11 D5S818: 12 D7S820: 11, 12 THO1: 8 TPOX: 11 vWA: 15, 17, 18
Virus Susceptibility:	Human poliovirus 1 Vesicular stomatitis virus
Tumor Formation:	Yes, in nude mice; forms well differentiated epidermoid carcinoma (grade I)
Biosafety:	1
Additional info:	The established line was found to contain bundles of tonofilaments in the cell cytoplasm and desmosomal regions were prominent at cell boundaries.
Culture Medium:	Dulbecco's Modified Eagle's Medium (DMEM) with 1% non-essential amino acids, 2 mM L-glutamine, 1 mM sodium pyruvate, and 1500 mg/L sodium bicarbonate, 1.0 g/L glucose, 90%; fetal bovine serum, 10%.

Subculturing: Remove medium, and rinse with PBS without calcium and magnesium. Remove the solution and add an additional 1 to 2 mL of trypsin-EDTA solution. Allow the flask to sit at room temperature (or at 37°C) until the cells detach. Add fresh culture medium, aspirate and dispense into new culture flasks. NOTE: For more information on enzymatic dissociation and subculturing of cell lines consult Chapter 12 in Culture of Animal Cells, a manual of Basic Technique by R. Ian Freshney, 6th edition, published by Alan R. Liss, N.Y., 2010.

Medium Renewal: 2 to 3 times per week

Subcultivation ratio: 1:3 to 1:6 is recommended

Culture Conditions: Atmosphere: air, 95%; carbon dioxide (CO₂), 5% Temperature: 37°C

Cryopreservation: 95% FBS + 5% DMSO (Dimethyl sulfoxide)

Thawing Frozen Cells: SAFETY PRECAUTION: It is highly recommended that protective gloves and clothing always be used and a full face mask always be worn when handling frozen vials. It is important to note that some vials leak when submerged in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vessel exploding or blowing off its cap with dangerous force creating flying debris.

1. Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the O-ring and cap out of the water. Thawing should be rapid (approximately 2 minutes).
2. Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% ethanol. All of the operations from this point on should be carried out under strict aseptic conditions.
3. For cells that are sensitive to DMSO it is recommended that the cryoprotective agent be removed immediately. Transfer the vial contents to a centrifuge tube containing 9.0 mL complete culture medium and spin at approximately 125 x g for 5 to 7 minutes.
4. Discard the supernatant and Resuspend cell pellet with the recommended complete medium (see the specific batch information for the culture recommended dilution ratio).
5. Incubate the culture in an appropriate atmosphere and temperature (see "Culture Conditions" for this cell line). NOTE: It is important to avoid excessive alkalinity of the medium during recovery of the cells. It is suggested that, prior to the addition of

the vial contents, the culture vessel containing the growth medium be placed into the incubator for at least 15 minutes to allow the medium to reach its normal pH (7.0 to 7.6).

References:

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22792: Rangan SR. A new human cell line (FaDu) from a hypopharyngeal carcinoma. *Cancer* 29: 117-121, 1972. PubMed: 4332311
23093: Faust JB, Meeker TC. Amplification and expression of the bcl-1 gene in human solid tumor cell lines. *Cancer Res.* 52: 2460-2463, 1992. PubMed: 1568216
23218: Giard DJ, et al. In vitro cultivation of human tumors: establishment of cell lines derived from a series of solid tumors. *J. Natl. Cancer Inst.* 51: 1417-1423, 1973. PubMed: 4357758

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ATCC:

HTB-43