

Product sheet

HCT-15 | 300229

General Information

Description HCT-15 is a human colorectal adenocarcinoma cell line established from a 44-year-old male patient with a primary tumor in the sigmoid colon. The cells were first cultured in 1970 and are maintained in DMEM/F12 medium supplemented with 10% fetal bovine serum (FBS). HCT-15 cells are characterized by their ability to form colonies in soft agar, a property associated with increased tumorigenicity. The cell line is widely used in research related to colorectal cancer, particularly in studies involving drug resistance and metastasis. HCT-15 cells are known to be resistant to 5-fluorouracil (5-FU) and oxaliplatin, which is a key feature of this model. The cell line is also notable for its high proliferation rate and its ability to form xenografts in immunodeficient mice.

Organism Human

Tissue Colon

Disease Colorectal adenocarcinoma

Synonyms HCT 15, HCT.15, HCT15

Cell Characteristics

Age 67 years

Gender Male

Morphology Epithelial cells

Growth properties Adherent

References and Identifiers

Citation HCT-15 (ATCC CCL-229) Cytion 300229

Biosafety level 1

NCBI_TaxID 9606

CellosaurusAccession CVCL_0292

Additional Information

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Thawing and Culturing Cells

1. **Thawing:** Thaw the vial immediately in a 37°C water bath. Transfer the cells to a pre-warmed T25 flask containing 10 mL of complete DMEM medium.
2. **Seeding:** Seed the cells into a T25 flask containing 10 mL of complete DMEM medium. The cell density should be approximately 1.5 x 10⁵ cells per flask.
3. **Medium Change:** After 24 hours, replace the medium with fresh complete DMEM medium. The medium should be changed every 3-4 days.
4. **Passaging:** When the cells reach 70-80% confluency, passage them into a new T25 flask.
5. **Flask Coating:** Coat the flask with 15 µg/mL poly-D-lysine (PDL) for 24 hours before seeding.
6. **Medium:** Use DMEM medium supplemented with 10% FBS for initial growth. For differentiation, use DMEM with 1% FBS and specific growth factors.
7. **Temperature:** Maintain cells at 37°C in a humidified 5% CO₂ incubator.
8. **Quality Control:** Regularly check for mycoplasma contamination and maintain accurate cell counts.

Incubation Atmosphere 37°C, 5% CO₂, humidified

Flask Coating PDL

Freezing Procedure Harvest cells at 70-80% confluency, wash with PBS, and resuspend in freezing medium. Store at -80°C.

Shipping Conditions Ship at 4°C in a cool pack. Do not freeze.

Storage Conditions Store at -150°C in liquid nitrogen. Vials contain 1.96 x 10⁶ cells.

HEK293T / HEK293T / HLA

Sterility Cells are mycoplasma-free and PCR negative. No antibiotics are present in the medium.