

## CaCo-2 | 300137

### CaCo-2

**Description** CaCo-2 is a human colon adenocarcinoma cell line. It is a highly invasive, metastasizing cell line that is widely used in research on colorectal cancer. The cells are derived from a 72-year-old male patient with a primary adenocarcinoma of the sigmoid colon. The cell line is characterized by its ability to form multicellular spheroids in culture, which is a key feature for studying tumor biology and drug response. CaCo-2 cells are typically grown in DMEM/F12 medium supplemented with 10% fetal bovine serum (FBS) for primary culture and in DMEM/F12 with 1% FBS for passaging. They are known for their high transmembrane electrical resistance (TEER), which makes them suitable for studying epithelial barrier function and drug transport across the gut barrier.

**Organism** Human

**Tissue** Colon

**Disease** Adenocarcinoma

**Applications** CaCo-2 is used in various applications, including drug screening, toxicity testing, and studying the mechanisms of drug absorption and transport across the gut barrier. It is also used in research on the role of the gut microbiome in colorectal cancer development.

**Synonyms** CaCo-2, CACO-2, Caco 2, CACO 2, CACO2, CaCo2, CaCO2, Caco2, Caco-II

### Characteristics

**Age** 72 years

**Gender** Male

**Ethnicity** Caucasian

**Morphology** Epithelial

**Growth properties** Adherent

### References

**Citation** CaCo-2 (ATCC CCL-215) Cytion 300137

**Biosafety level** 1

**NCBI\_TaxID** 9606



## Cell Caco-2 | 300137

### Freeze medium

Freezing medium: DMEM (Cytion) + 10% FBS + 10% DMSO

### Thawing and Culturing Cells

1. Thaw the vial in a 37°C water bath, and transfer the cells to a pre-warmed medium.
2. Centrifuge at 300 x g for 3 minutes, wash with DMEM, and resuspend in 15 ml of DMEM.
3. Seed the cells into a 25 cm<sup>2</sup> flask with 8 ml of DMEM.
4. Incubate at 37°C in 5% CO<sub>2</sub> until cells reach 70% confluency.
5. Harvest cells by trypsinization.
6. Seed cells into a 25 cm<sup>2</sup> flask with 8 ml of DMEM.
7. Incubate at 37°C in 5% CO<sub>2</sub> until cells reach 70% confluency.
8. Harvest cells by trypsinization.

### Incubation Atmosphere

37°C, 5% CO<sub>2</sub>

### Flask Coating

None

### Freezing Procedure

Freeze cells in DMEM + 10% FBS + 10% DMSO at -80°C.

### Shipping Conditions

Ship cells in DMEM + 10% FBS + 10% DMSO at -80°C.

### Storage Conditions

Store cells in DMEM + 10% FBS + 10% DMSO at -150°C for 196 days.

Cell Caco-2 / Cell Caco-2 / HLA

