

# MCF10A | 305026

**Description**

MCF10A is a non-tumorigenic, immortalized mammary epithelial cell line derived from a 36-year-old female patient with ductal carcinoma in situ (DCIS). The cells are characterized by their ability to form mammary-like acini in culture, which is a key feature used to study normal mammary gland biology and the early stages of breast cancer. MCF10A cells are widely used in research to investigate the mechanisms of cell growth, differentiation, and the effects of various growth factors and hormones on mammary epithelial cells. They are also used to study the role of estrogen in breast cancer progression and to evaluate the efficacy of anti-estrogen therapies. The cell line is maintained in DMEM/F12 medium supplemented with insulin, transferrin, selenium, and hydrocortisone, which are essential for the survival and growth of these cells.

**Organism** *Homo sapiens*

**Tissue** Mammary gland epithelium

**Synonyms** MCF-10A, MCF 10A, MCF.10A, MCF.10A, MCF10A, MCF10-A, MCF10a, MCF10A, MCF-10 Attached, Michigan Cancer Foundation-10A

**Age** 36 years

**Gender** Female

**Morphology** Epithelial cells

**Growth properties** Adherent

**Citation** MCF10A (Michigan Cancer Foundation 305026)

**Biosafety level** 1

**NCBI\_TaxID** 9606

**CellosaurusAccession** CVCL\_0598



