

Product sheet

**MPC5 | 305481**

**General Information**

<b>Description</b>	MPC5 is a mouse mammary epithelial cell line derived from a C57BL/6J mouse. It is a highly proliferative, immortalized cell line that expresses mammary-specific markers and is used for studying mammary gland development and carcinogenesis. MPC5 cells are maintained in vitro in DMEM/F12 medium supplemented with insulin, transferrin, selenium, and prolactin. The cell line is characterized by its ability to form mammary-like structures in vivo when implanted into syngeneic mice. MPC5 cells are also used for studying the effects of various growth factors and signaling pathways on mammary epithelial cells. The cell line is associated with the expression of miR-204-3p, which is a microRNA that has been shown to regulate mammary epithelial cell proliferation and differentiation.
<b>Organism</b>	Mouse
<b>Tissue</b>	Mammary gland
<b>Disease</b>	None
<b>Synonyms</b>	MPC-5, MPC5, MPC5-5

**Genetic Information**

<b>Breed/Subspecies</b>	(CBA/Ca x C57BL/10)Tg(H2Kb-tsA58) Mice
<b>Age</b>	8-12 weeks
<b>Gender</b>	Male
<b>Cell type</b>	Epithelial
<b>Growth properties</b>	Adherent

**Characterization and Safety**

<b>Citation</b>	MPC5 (MPC5) Cytion 305481
<b>Biosafety level</b>	2
<b>NCBI_TaxID</b>	10090
<b>CellosaurusAccession</b>	CVCL_AS87

**Additional Information**

**SV40 MPC5 | 305481**

**Viruses** SV40 (SV40)

**Media**

**Culture Medium** RPMI 1640, w: 2.0 mM  $\text{NaH}_2\text{PO}_4$ , w: 2.0 g/L  $\text{NaHCO}_3$  (Cytion 820700a)

**Supplements** 10% FBS

**Dissociation Reagent** Trypsin

**Freeze medium** RPMI 1640, w: 2.0 mM  $\text{NaH}_2\text{PO}_4$ , w: 2.0 g/L  $\text{NaHCO}_3$  (Cytion 820700a) + 10% DMSO + 10% FBS

- Thawing and Culturing Cells**
1. Thaw the cells in a water bath at 37°C. Add the cells to a pre-warmed culture medium.
  2. Centrifuge the cells at 300 x g for 3 minutes. Remove the supernatant and wash the cells with PBS.
  3. Resuspend the cells in a fresh culture medium and seed them into a pre-warmed flask.
  4. Incubate the cells at 37°C in a 5%  $\text{CO}_2$  atmosphere.
  5. Monitor the cell growth and passage the cells when they reach 70-80% confluency.
  6. For passage, trypsinize the cells and seed them into a new flask.
  7. For freezing, trypsinize the cells and resuspend them in a freezing medium.
  8. Freeze the cells in a controlled rate freezer and store them at -80°C.

**Incubation Atmosphere** 37°C, 5%  $\text{CO}_2$

**Flask Coating** Cell culture medium

**Freezing Procedure** Freeze at -80°C

