

MCF7 / GFP Stable Cell Line

Catalog Number	Amount	Storage
SC050-G	1 vial of cells (1.0 ml / 2×10^6 cells) in 90% complete medium and 10% DMSO	Liquid nitrogen

Product Description

The MCF7 is human breast cancer cell line, an epithelial cancer cell line derived from breast adenocarcinoma. It is widely used for *in vitro* breast cancer studies. MCF-7 cells is able to process estrogen in the form of estradiol via estrogen receptors in the cell cytoplasm. This results in the MCF-7 cell line being an estrogen receptor (ER) positive cell line. MCF-7 is also progesterone receptor positive and HER2 negative.

The MCF7 / GFP reporter cell line was transformed from the MCF7 cell line, and stably expresses the fluorescent enhanced GFP marker. The line was established by transduction with GFP expression lentivirus containing a Puromycin-resistance gene (under RSV promoter) for selection the stable cells. The GFP is constitutively expressed at high-levels under the enhanced EF1a promoter. The following expression construct was integrated into cell's genome.

Core expression cassette for SC050-G:



Culture procedures

- Thaw the vial of frozen cells quickly in a 37°C water bath (1-3min); decontaminate the outside of the vial with 70% ethanol.
- Transfer the entire contents of the cryovial into a T-75 cm² flask containing 15 ml of pre-warmed complete medium. Incubate the cells overnight in a 37°C incubator, 5% CO₂.
- Incubate the cells and monitor cell density.
- Passage cells (1:5 dilution) when the culture reaches 80-90% confluence.
- Freeze cells at a density of $1-3 \times 10^6$ cells/ml using 90% complete medium with 10% DMSO.

AMSBIO | www.amsbio.com | info@amsbio.com

 **UK & Rest of the World**
184 Park Drive, Milton Park
Abingdon OX14 4SE, UK
T: +44 (0)1235 828 200
F: +44 (0) 1235 820 482

 **North America**
1035 Cambridge Street,
Cambridge, MA 02141
T: +1 (617) 945-5033 or
T: +1 (800) 987-0985
F: +1 (617) 945-8218

 **Germany**
Bockenheimer Landstr. 17/19
60325 Frankfurt/Main
T: +49 (0) 69 779099
F: +49 (0) 69 13376880

 **Switzerland**
Centro Nord-Sud 2E
CH-6934 Bioggio-Lugano
T: +41(0) 91 604 55 22
F: +41(0) 91 605 17 85



Complete medium

- MEM medium (ThermoFisher Cat#: 11090073)
- 2mM L-glutamine
- 10% FBS
- 0.1 mM Non-Essential Amino Acid (NEAA);
- 1 mM sodium pyruvate;
- 1% penicillin/streptomycin (or 1% Antibiotic/antmycotic);
- 10 ug/ml bovine insulin (opitonal)
- 0.625 ug/ml of Puromycin (optional)

Quality Control

Each vial contains $\sim 2 \times 10^6$ cells with >95% viability before freezing. Cells are verified to be free of bacteria, viruses, and mycoplasma.

Warranty and user terms

1. This product is warranted to perform as described when used in accordance with this manual. AMSBIO MAKES NO REPRESENTATIONS AND EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED. AMSBIO's sole remedy for breach of warranty should be, at the option of AMSBIO, to repair or replace the product if this product does not meet the stated quality standard.
2. By paying the purchase price, the buyer is granted a non-transferable, non-exclusive license to use the product. This product is sold **for research and development purposes only**.
3. This product is limited to the laboratory that the product is delivered to. This Product is not for resale, distribution, or transfer for any purpose, including transfer of the Product as a component of any products
4. This Product should be used only for non-profit purposes, including any products and services usages. Furthermore, **research use only** means that this product is excluded, without limitation, from resale, repackaging, or modification for the purpose of making or selling of any commercial products or services without the written approval of AMSBIO.
5. AMSBIO is not liable, and does not have any responsibility or liability, whatsoever for any direct and indirect, consequential, or other damages resulting from using this Product.

AMSBIO | www.amsbio.com | info@amsbio.com

 **UK & Rest of the World**
184 Park Drive, Milton Park
Abingdon OX14 4SE, UK
T: +44 (0)1235 828 200
F: +44 (0) 1235 820 482

 **North America**
1035 Cambridge Street,
Cambridge, MA 02141
T: +1 (617) 945-5033 or
T: +1 (800) 987-0985
F: +1 (617) 945-8218

 **Germany**
Bockenheimer Landstr. 17/19
60325 Frankfurt/Main
T: +49 (0) 69 779099
F: +49 (0) 69 13376880

 **Switzerland**
Centro Nord-Sud 2E
CH-6934 Bioggio-Lugano
T: +41(0) 91 604 55 22
F: +41(0) 91 605 17 85