

# Product Sheet

## Luciferase OVCAR3 Cell Line

Catalog number: GM-C31422

Version 3.3.1.250611

<b>Description</b>	Luciferase OVCAR3 Cell Line is a clonal stable OVCAR3 cell line that constitutively expresses the Luciferase gene, constructed using lentiviral technology.
<b>Quantity</b>	4E6 Cells per vial, 1 mL
<b>Product Format</b>	3 vials of frozen cells
<b>Shipping</b>	Shipped on dry ice
<b>Storage Conditions</b>	Liquid nitrogen immediately upon receipt
<b>Target</b>	/
<b>Gene ID/Uniprot ID</b>	/
<b>Host Cell</b>	OVCAR3
<b>Recovery Medium</b>	RPMI 1640(ATCC)+20% FBS+1% P.S+0.01 mg/mL Bovine Insulin
<b>Growth medium</b>	RPMI 1640(ATCC)+20% FBS+1% P.S+0.01 mg/mL Bovine Insulin+0.25 µg/mL Puromycin
<b>Note</b>	Cells should be cultured using ATCC/30-2001 RPMI 1640 medium or Growth medium from Genomeditech. The serum should be Cegrogen biotech/A0500-3010 or sourced from Gibco.
<b>Freezing Medium</b>	90% FBS+10% DMSO
<b>Growth properties</b>	Adherent
<b>Growth Conditions</b>	37°C, 5% CO <sub>2</sub>
<b>Mycoplasma Testing</b>	The cell line has been screened to confirm the absence of Mycoplasma species.
<b>Safety considerations</b>	Biosafety Level 2
<b>Note</b>	It is recommended to expand the cell culture and store a minimum of 10 vials at an early passage for potential future use.

## Materials

Reagent	Manufacturer/Catalogue No.
RPMI 1640	gibco/C11875500BT
Fetal Bovine Serum	Cegrogen biotech/A0500-3010
Pen/Strep	Thermo/15140-122
Puromycin	Genomeditech/ <a href="#">GM-040401</a>
96 well White Flat Bottom Polystyrene Not Treated Microplate	Corning/3912
GMOne-Step Luciferase Reporter Gene Assay Kit	Genomeditech/ <a href="#">GM-040503</a>

## Figures

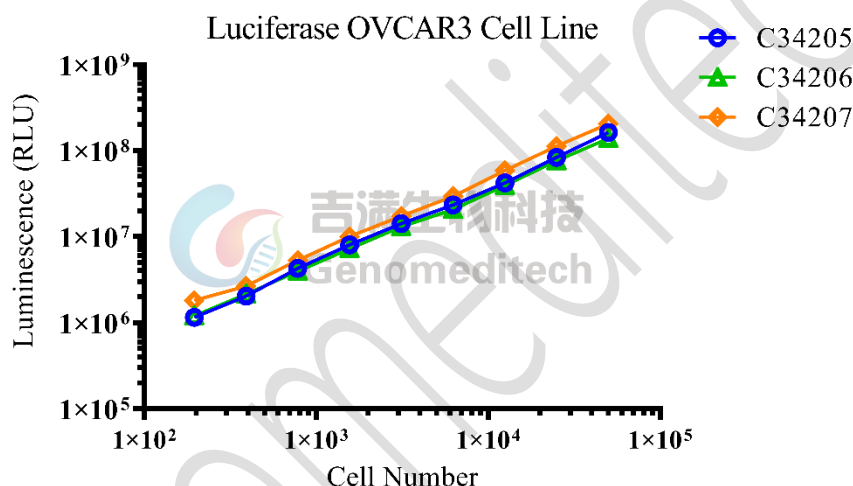


Figure 1 | Correlation between the number of cells and bioluminescence values. Serial dilutions of Luciferase OVCAR3 Cell Line (Cat. GM-C31422) (96-well format). The firefly luciferase activity was measured using the GMOne-Step Luciferase Reporter Gene Assay Kit (Cat. [GM-040503](#)).

## Cell Recovery

Recovery Medium: RPMI 1640(ATCC)+20% FBS+1% P.S+0.01 mg/mL Bovine Insulin

To insure the highest level of viability, thaw the vial and initiate the culture as soon as possible upon receipt. If upon arrival, continued storage of the frozen culture is necessary, it should be stored in liquid nitrogen vapor phase and not at -70°C. Storage at -70°C will result in loss of viability.

- Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the O-ring and cap out of the water. Thawing should be rapid (approximately 2 - 3 minutes).
- Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% ethanol. All of the operations from this point on should be carried out under strict aseptic conditions.

- c) Transfer the vial contents to a centrifuge tube containing 5.0 mL complete culture medium and spin at approximately 176 x g for 5 minutes. Discard supernatant.
- d) Resuspend cell pellet with the recommended recovery medium. And dispense into appropriate culture dishes.
- e) Incubate the culture at 37°C in a suitable incubator. A 5% CO<sub>2</sub> in air atmosphere is recommended if using the medium described on this product sheet.

## Cell Freezing

Freezing Medium: 90% FBS+10% DMSO

- a) Centrifuge at 176 x g for 3 minutes to collect cells.
- b) Resuspend the cells in pre-cooled freezing medium and adjust the cell density to 4E6 cells/mL.
- c) Aliquot 1 mL into each vial.
- d) Place the vial in a controlled-rate freezing container and store at -80°C for at least 1 day, then transfer to liquid nitrogen as soon as possible.

## Cell passage

Growth medium: RPMI 1640(ATCC)+20% FBS+1% P.S+0.01 mg/mL Bovine Insulin+0.25 µg/mL Puromycin

For the first 1 to 2 passages post-resuscitation, use the recovery medium. Once the cells have stabilized, switch to a growth medium.

- a) Subculturing is necessary when the cell density reaches 80%. It is recommended to perform subculturing at a ratio of 1:2 to 1:3 every 3 to 4 days.
- b) Remove and discard culture medium.
- c) Briefly rinse the cell layer with PBS to remove all traces of serum that contains trypsin inhibitor.
- d) Add 1.0 mL of 0.25% (w/v) Trypsin-EDTA solution to dish and observe cells under an inverted microscope until cell layer is dispersed (usually within 3 to 4 minutes at 37°C).
- e) Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal.
- f) Add 2.0 mL of growth medium to mix well and aspirate cells by gently pipetting.
- g) After centrifugation, resuspend the pellet and add appropriate aliquots of the cell suspension to new culture vessels.
- h) Incubate cultures at 37°C.

**Subcultivation Ratio: A subcultivation ratio of 1:2 - 1:3 is recommended**

**Medium Renewal: Every 3 to 4 days**

## Notes

- a) Cell growth rate is slow. Repeated pipetting during digestion should be avoided, as it may result in severe cell aggregation. Cell morphology is heterogeneous, with some large cells containing vacuoles. The presence of black granules within the cytoplasm of these cells is considered a normal phenomenon.

## Related Products

Labeled Cells	
<a href="#">Luciferase-GFP MCF-7 Cell Line</a>	<a href="#">Luciferase A498 Cell Line</a>
<a href="#">Luciferase B16-F10 Cell Line</a>	<a href="#">Luciferase HL-60 Cell Line</a>
<a href="#">Luciferase MIA PaCa-2 Cell Line</a>	<a href="#">Luciferase MM.1R Cell Line</a>
<a href="#">Luciferase NCI-H929 Cell Line</a>	<a href="#">Luciferase U-937 Cell Line</a>
<a href="#">Luciferase-ZsGreen1 K562 Cell Line</a>	<a href="#">Luciferase-ZsGreen1 Raji Cell Line</a>
<a href="#">D-Luciferin, Potassium Salt</a>	<a href="#">D-Luciferin, Sodium Salt</a>

## Limited Use License Agreement

Genomeditech (Shanghai) Co., Ltd grants to the Licensee all intellectual property rights, exclusive, non-transferable, and non-sublicensable rights of the Licensed Materials; Genomeditech (Shanghai) Co., Ltd will retain ownership of the Licensed Materials, cell line history packages, progeny, and the Licensed Materials including modified materials.

Between Genomeditech (Shanghai) Co., Ltd, and Licensee, Licensee is not permitted to modify cell lines in any way. The Licensee shall not share, distribute, sell, sublicense, or otherwise provide the Licensed Materials, or progenitors to third parties such as laboratories, departments, research institutions, hospitals, universities, or biotechnology companies for use other than for the purpose of outsourcing the Licensee's research.

Please refer to the Genomeditech Cell Line License Agreement for details.