

Product Sheet

Luciferase RAMOS Cell Line

Catalog number: GM-C41936

Version 3.3.1.250926

Description	Luciferase RAMOS Cell Line is a clonal stable RAMOS cell line that constitutively expresses the Luciferase gene, constructed using lentiviral technology.
Quantity	5E6 Cells per vial, 1 mL
Product Format	3 vials of frozen cells
Shipping	Shipped on dry ice
Storage Conditions	Liquid nitrogen immediately upon receipt
Target	/
Gene ID/Uniprot ID	/
Host Cell	RAMOS
Recovery Medium	RPMI 1640+10% FBS+1% P.S
Growth medium	RPMI 1640+10% FBS+1% P.S+1 µg/mL Puromycin
Note	None
Freezing Medium	90% FBS+10% DMSO
Growth properties	Suspension
Growth Conditions	37°C, 5% CO ₂
Mycoplasma Testing	The cell line has been screened to confirm the absence of Mycoplasma species.
Safety considerations	Biosafety Level 2
Note	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	ExCell/FSP500
Pen/Strep	Thermo/15140-122
Puromycin	Genomeditech/ GM-040401
GMOne-Step 2.0 Luciferase Reporter Gene Assay Kit	Genomeditech/ GM-040513

Figures

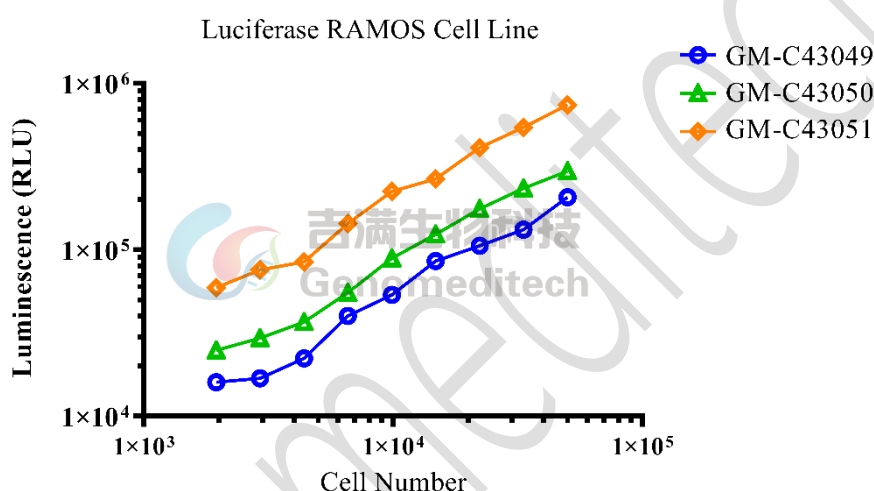


Figure 1 | Correlation between the number of cells and bioluminescence values. Serial dilutions of Luciferase RAMOS Cell Line (Cat. GM-C41936 ; composed of GM-C43049, GM-C43050, and GM-C43051) (96-well format). The firefly luciferase activity was measured using the Luciferase Reporter Assay Kit (Genomeditech).

Cell Recovery

Recovery Medium: RPMI 1640+10% FBS+1% P.S

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% CO₂ 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 5E6 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+10% FBS+1% P.S+1 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) After the first resuscitation, the cells can be subcultured after approximately 2–3 days. After 1 to 2 passages, the culture medium can be changed to a growth medium supplemented with antibiotics. If passage is not possible within 3 days, it is recommended to supplement with recovery medium as appropriate and place the flask in a horizontal position.
- b) When the cell density reaches 8E5 cells/mL, perform a 1:3 split, and continue subculturing every 2–3 days. Do not allow the cell density to exceed 1E6 cells/mL. It is recommended to use T25 flasks for passaging and culture.
- c) These cells are suspension cells, and it is recommended to use the "half-medium change" method to maintain optimal cell conditions during passaging.
- d) During passaging, you can directly add fresh growth medium to the culture flask, gently pipette to resuspend the cells, and then transfer the cell suspension to a new T-25 flask for continued culture.

Subcultivation Ratio: Maintain cultures at a cell concentraion between 4E5 and 8E5 viable cells/mL.

Medium Renewal: Every 2 to 3 days

Notes

- a) The cell line is density-sensitive; during routine culture and passaging, maintain the cell density within an appropriate range.
- b) FBS should be heat-inactivated at 56°C for 30 minutes to inactivate complement and certain viruses, with minimal impact on most growth factor and cytokine activities.

Related Products

Labeled Cells	
Luciferase-GFP MCF-7 Cell Line	Luciferase A498 Cell Line
Luciferase B16-F10 Cell Line	Luciferase Daudi Cell Line
Luciferase HL-60 Cell Line	Luciferase Jurkat Cell Line
Luciferase MIA PaCa-2 Cell Line	Luciferase MM.1R Cell Line
Luciferase NCI-H929 Cell Line	Luciferase OVCAR3 Cell Line
Luciferase U-937 Cell Line	Luciferase-ZsGreen1 K562 Cell Line
Luciferase-ZsGreen1 Raji Cell Line	
D-Luciferin, Potassium Salt	D-Luciferin, Sodium Salt

License Agreement:

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