Genomeditech (Shanghai) Co.,Ltd.
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Product Sheet

MCF-7(CD24-Positive) Luciferase Cell Line

Catalog number: GM-C12953

Version 3.3.1.250113

Description	MCF-7(CD24-Positive) Luciferase Cell Line is a clonal stable MCF-7 cell line that constitutively expresses the Luciferase gene, constructed using lentiviral technology, and it endogenously expresses CD24 gene.
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	MCF-7
Recovery Medium	MEM(Gibco)+20% FBS+1% P.S+0.01 mg/mL Bovine Insulin
Growth medium	MEM(Gibco)+10% FBS+1% P.S+0.01 mg/mL Bovine Insulin+0.75 μg/mL Puromycin
Note	Cells should be cultured using Gibco/11095080 MEM medium or Growth medium from Genomeditech. The serum should be Cegrogen biotech/A0500-3010 or sourced from Gibco.
Freezing Medium	90% FBS+10% DMSO
Growth properties	Adherent
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.

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Materials

Reagent	Manufacturer/Catalogue No.
MEM	gibco/11095-080
Fetal Bovine Serum	Cegrogen biotech/A0500-3010
Pen/Strep	Thermo/15140-122
Puromycin	Genomeditech/GM-040401
APC Anti-CD24 antibody	Abcam/ab239286
GMOne-Step Luciferase Reporter Gene Assay Kit	Genomeditech/GM-040503

Figures

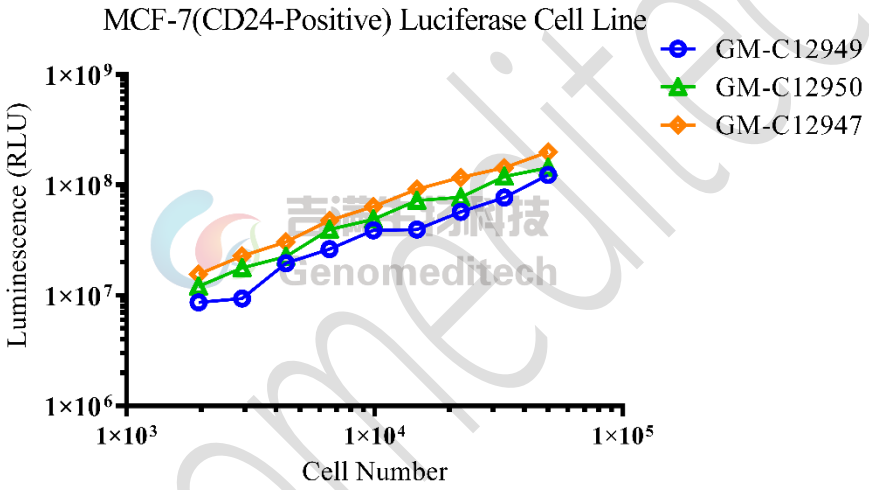
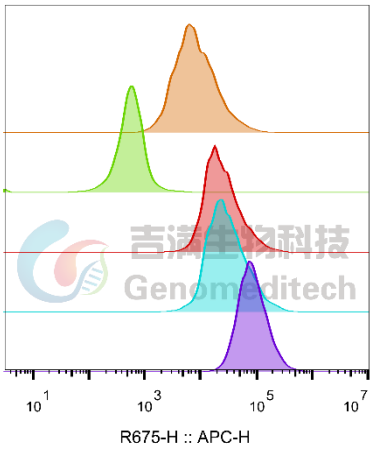


Figure 1 | Correlation between the number of cells and bioluminescence values. Serial dilutions of MCF-7(CD24-Positive) Luciferase Cell Line (Cat. GM-C12953) (96-well format). The firefly luciferase activity was measured using the GMOne-Step Luciferase Reporter Gene Assay Kit (Cat. GM-040503).



	SampleID	Geometric Mean : R675-H
	MCF-7 APC-anti-H_CD24	8170
	MCF-7 APC-M_IgG	548
	MCF-7 APC-anti-H_CD24 #2	24522
	MCF-7 APC-anti-H_CD24 #4	29507
	MCF-7 APC-anti-H_CD24 #8	84336

Figure 2 | MCF-7(CD24-Positive) Luciferase Cell Line (Cat. GM-C12953) was determined by flow cytometry using APC Anti-CD24 antibody (Abcam/ab239286).

Cell Recovery

Recovery Medium: MEM(Gibco)+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.

a) 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).

b) 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_2 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.

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Cell passage

Growth medium: MEM(Gibco)+10% FBS+1% P.S+0.01 mg/mL Bovine Insulin+0.75 μg/mL Puromycin

For the first 1 to 3 passages post-resuscitation, use the recovery medium. Once the cells have stabilized, switch to a growth medium.

a) Remove and discard culture medium.

b) Briefly rinse the cell layer with PBS to remove all traces of serum that contains trypsin inhibitor.

c) 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 1 to 2 minutes at 37°C).

d) 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.

e) Add 2.0 mL of growth medium to mix well and aspirate cells by gently pipetting.

f) After centrifugation, resuspend the pellet and add appropriate aliquots of the cell suspension to new culture vessels.

g) Incubate cultures at 37°C.

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

Medium Renewal: Every 3 to 5 days

Notes

a) After cell resuscitation, the first few generations exhibit slow adherence, which is a normal phenomenon. Adherent cells can be observed 2 - 3 days after resuscitation. Cells exhibit density dependence, growing very slowly at low densities. Once their condition has stabilized, their growth rate tends to become consistent.

b) Due to the potentially long subcultivation intervals after the initial resuscitation, it is necessary to add fresh medium or replace it entirely if no handling occurs for 2 - 3 days.

c) During cell culture, some floating cells may be present. Viable suspended cells can be re-cultured in the flask by centrifugation and re-seeding (specifically observe during passaging; if the proportion is small, they can be discarded directly).

d) Cells should be cultured using Gibco/11095080 MEM medium or complete media from Geomeditech. Serum should be the same as specified in the instructions or use Gibco serum.

Related Products

CD24-Siglec10	
H_CD24 CHO-K1 Cell Line	H_CD24 HEK-293 Cell Line
H_CD24 MC38 Cell Line	H_Siglec10 CHO-K1 Cell Line
SIGLEC15	
Cynomolgus_SIGLEC15 CHO-K1 Cell Line	H_SIGLEC15 CHO-K1 Cell Line
H_SIGLEC15 HEK-293 Cell Line	H_SIGLEC15 MC38 Cell Line
H_SIGLEC15 U2OS Cell Line	Mouse_SIGLEC15 CHO-K1 Cell Line
Anti-Siglec15 mIgG2a Antibody(5G12)	

SIGLEC9	
Cynomolgus_SIGLEC9 CHO-K1 Cell Line	H_SIGLEC9 CHO-K1 Cell Line
H_SIGLEC9 HEK-293 Cell Line	
Anti-siglec9 mIgG1 Antibody(2D4)	
SIGLEC8	
H_SIGLEC8 CHO-K1 Cell Line	H_SIGLEC8 HEK-293 Cell Line
Olive Baboon_SIGLEC8 CHO-K1 Cell Line	
Anti-H_SIGLEC8 hIgG1 Antibody(1H10)	
SIGLEC3(CD33)	
H_CD33(SIGLEC3) CHO-K1 Cell Line	
Anti-H_CD33(siglec3) hIgG4 Antibody(Gemtuzumab)	

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