

Product Sheet

GFP MKN45 Cell Line

Catalog number: GM-C26268

Version 3.3.1.250115

Description	GFP MKN45 Cell Line is a stable pool of MKN45 cells constructed using lentiviral technology
Quantity	5E6 Cells per vial, 1 mL
Product Format	1 vial of frozen cells
Shipping	Shipped on dry ice
Storage Conditions	Liquid nitrogen immediately upon receipt
Target	/
Gene ID/Uniprot ID	/
Host Cell	MKN45
Recovery Medium	RPMI 1640+20% FBS+1% P.S
Growth medium	RPMI 1640+20% FBS+1% P.S+1 µg/mL Puromycin
Note	None
Freezing Medium	90% FBS+10% DMSO
Growth properties	Mixed: adherent and 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	Cegrogen biotech/A0500-3010
Pen/Strep	Thermo/15140-122
Puromycin	Genomeditech/GM-040401

Figures

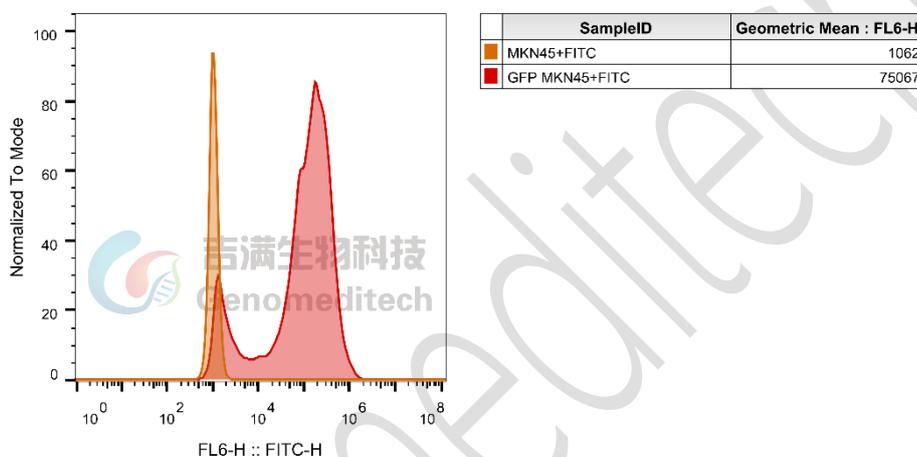


Figure 1 | Flow cytometry analysis of green fluorescent protein (GFP) expression in GFP MKN45 Cell Line (Cat. GM-C26268)

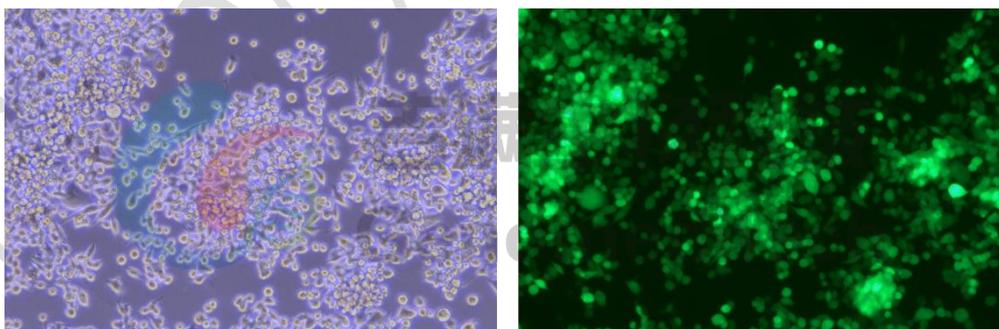


Figure 2 | GFP MKN45 Cell Line (Cat. GM-C26268) observed under a fluorescent microscope.

Cell Recovery

Recovery Medium: RPMI 1640+20% 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.

- 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 $176 \times g$ 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 $176 \times g$ for 3 minutes to collect cells.
- b) Resuspend the cells in pre-cooled freezing medium and adjust the cell density to 5×10^6 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+20% FBS+1% P.S+1 $\mu\text{g}/\text{mL}$ 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) Under normal conditions, these cells exist as both adherent and round suspension cells.
- b) When changing the medium, take care to retain the suspension cells. During passaging, collect both the adherent and suspension cells together before subculturing.
- 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 1:3 - 1:4 is recommended

Medium Renewal: Every 2 to 3 days

Notes

- Under normal conditions, these cells exist as both adherent and round suspension cells.
- When changing the medium, take care to retain the suspension cells. During passaging, collect both the adherent and suspension cells together before subculturing.
- Once cell status stabilizes, the number of dead cells will decrease after passaging, the growth rate will become stable, cell morphology will be uniform, and the cells will appear robust.

Related Products

Labeled Cells	
Luciferase-GFP MCF-7 Cell Line	Luciferase A498 Cell Line
Luciferase B16-F10 Cell Line	Luciferase HL-60 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

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