

Product Sheet

H_GDF15 MC38 Cell Line

Catalog number: GM-C34671

Version 3.3.1.260709

Description	H_GDF15 MC38 Cell Line is a clonal stable MC38 cell line that constitutively expresses the human GDF15 gene, 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	H_GDF15
Gene ID/Uniprot ID	Q99988 2010-11-30 v3
Host Cell	MC38
Recovery Medium	DMEM+10% FBS+1% P.S
Growth medium	DMEM+10% FBS+1% P.S+2.5 µg/mL Puromycin
Note	None
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.

Materials

Reagent	Manufacturer/Catalogue No.
DMEM	Gibco/C11995500BT
Fetal Bovine Serum	ExCell/FSP500
Pen/Strep	Thermo/15140-122
Puromycin	Genomeditech/ GM-040401
Human GDF15 ELISA Kit	SinoBiological/KIT10936
mouse GDF-15 ELISA Kit	Abclonal/RK00369

Figures

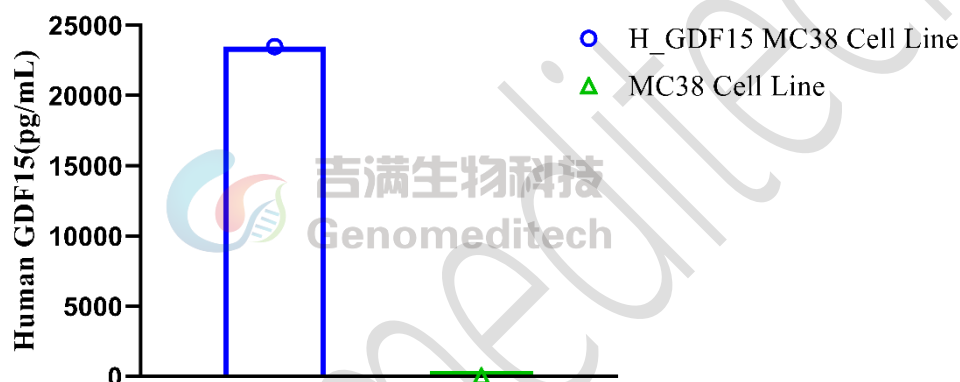


Figure 1 | GDF15 expression analysis in H_GDF15 MC38 Cell Line (Cat. GM-C34671) by ELISA. Cell culture supernatant was collected from wild-type MC38 and H_GDF15 MC38 Cell Line. Expression level of mouse and human GDF15 were analyzed by ELISA (Human GDF15 ELISA Kit/SinoBiological/KIT10936; mouse GDF-15 ELISA Kit/Abclonal/RK00369). Notably, mouse GDF15 was undetectable in both cell lines and is therefore not shown in the figure.

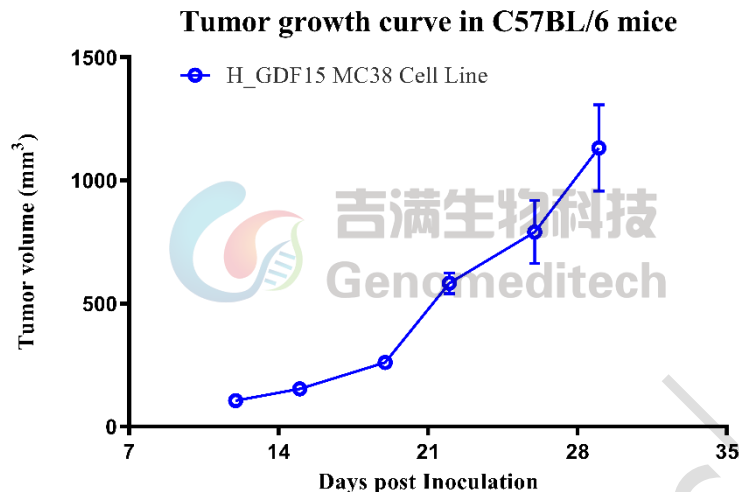


Figure 2 | Tumor growth curves of H_GDF15 MC38 in C57BL/6 mice. H_GDF15 MC38 cells (1×10^6 per mouse) were subcutaneously inoculated into C57BL/6 mice (female, 8 weeks old, $n = 2$). Tumor volume was measured twice per week and is presented as mean $\pm$ SEM.

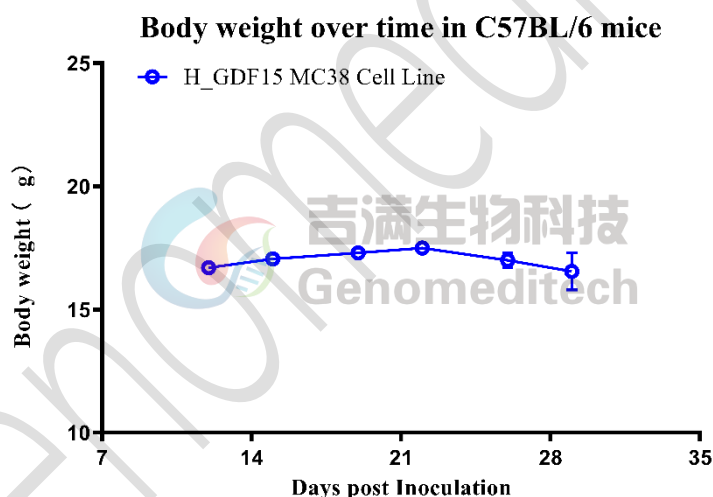


Figure 3 | Body weight changes after implantation of H_GDF15 MC38 in C57BL/6 mice. Under the same conditions, body weight was measured twice per week and is presented as mean $\pm$ SEM.

Cell Recovery

Recovery Medium: DMEM+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.

- 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% 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: DMEM+10% FBS+1% P.S+2.5 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) 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 30 to 60 seconds 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 1:4 - 1:5 is recommended

Medium Renewal: Every 2 to 3 days

Notes

- a) After the stabilization of the cell condition, there will be fewer dead cells post-passage, the cell growth rate will tend to stabilize, cell morphology will become uniform, and the cells will appear robust.

Sequence

GDF15 Q99988 2010-11-30 v3

MPGQELRTVNGSQMLLVLLVLSWLPHGGLSLAEASRASFPGPSELHSEDSRFRELKRKYEDLLTRLRANQS
WEDSNTDLVPAPAVRILTPEVRLGSGGHLHLRISRALPEGLPEASRLHRLFRLSPTASRSWDVTRPLRRQLS
LARPQAPALHLRLSPPPSQSDQLLAESSARPQLEHLRPQAARGRRRARARNGDHCPLGPGRCCRLHTVRAS
LEDLGWADWVLSPREVQVTMCIGACPSQFRAANMHAQIKTSLHRLKPDTVPAPCCVPASYNPMVLIQKTD
GVSLQTYDDLLAKDCHCI

Related Products

GDF15:GFRAL	
H_GDF15 Reporter 293 Cell Line	H_GDF15 Reporter 293 Cell Line (High Basal)
H_GDF15 Reporter 293 DDX35TM Cell Line	Mouse_GDF15 Reporter 293 Cell Line
H_GFRAL CHO-K1 Cell Line	H_GFRAL HEK-293 Cell Line
Membrane Bound H_GDF15 CHO-K1 Cell Line	
Anti-GDF15 hIgG1 Reference Antibody(Ponsbio)	Anti-GDF15 hIgG4 Reference Antibody (Visubio)
Anti-GFRAL hIgG1 Antibody(NGM-120)	Anti-H_GDF15 hIgG4 Antibody(CTL-002)
Anti-H_GFRAL hIgG4 Antibody(QUEL-0301)	
Biotinylated Human GFRAL Protein; His-Avi Tag	Cynomolgus GFRAL Protein; His Tag
Human GDF15 Protein; His Tag	Human GFRAL Protein; hFc Tag
Human GFRAL Protein; His Tag	Human pro-GDF15 Protein; His Tag

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