

Product Sheet

H_TFRC(CD71) MC38 Cell Line

Catalog number: GM-C30499

Version 3.3.1.260116

| | |
|------------------------------|---|
| Description | H_TFRC(CD71) MC38 Cell Line is a clonal stable MC38 cell line that constitutively expresses the human TFRC(CD71) 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 | Human_TFRC(CD71) |
| Gene ID/Uniprot ID | P02786 |
| 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 | VivaCell/C3110-0500 |
| Fetal Bovine Serum | ExCell/FSP500 |
| Pen/Strep | Thermo/15140-122 |
| Puromycin | Genomeditech/ GM-040401 |
| Anti-H_TFRC(CD71) hIgG1 Antibody(Pabinafusp) | Genomeditech/ GM-30129AB |

Figures

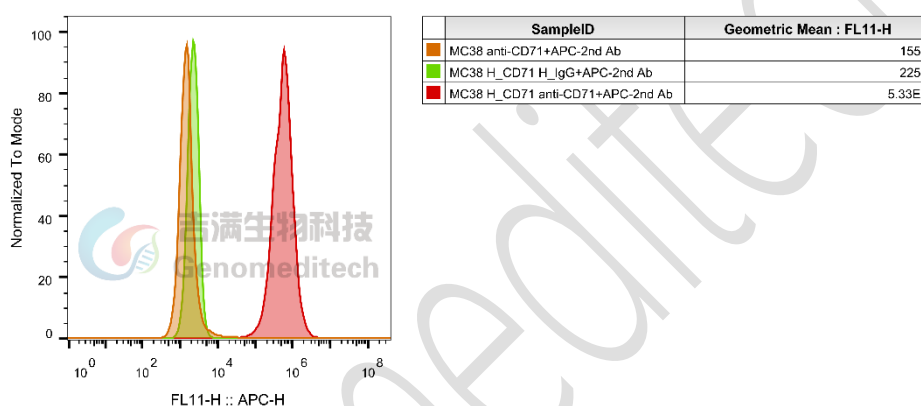


Figure 1 | H_TFRC(CD71) MC38 Cell Line (Cat. GM-C30499) was determined by flow cytometry using Anti-H_TFRC(CD71) hIgG1 Antibody(Pabinafusp) (Cat. [GM-30129AB](#)).

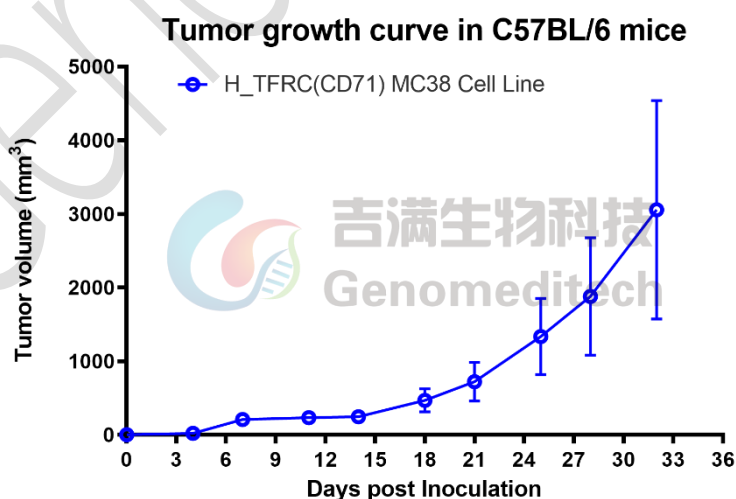


Figure 2 | Tumor growth curves of H_TFRC(CD71) MC38 in C57BL/6 mice. H_TFRC(CD71) MC38 cells (1×10^6 per mouse) were subcutaneously inoculated into C57BL/6 mice (female, 8 weeks old, $n = 3$). Tumor volume was measured twice per week and is presented as mean \pm SEM.

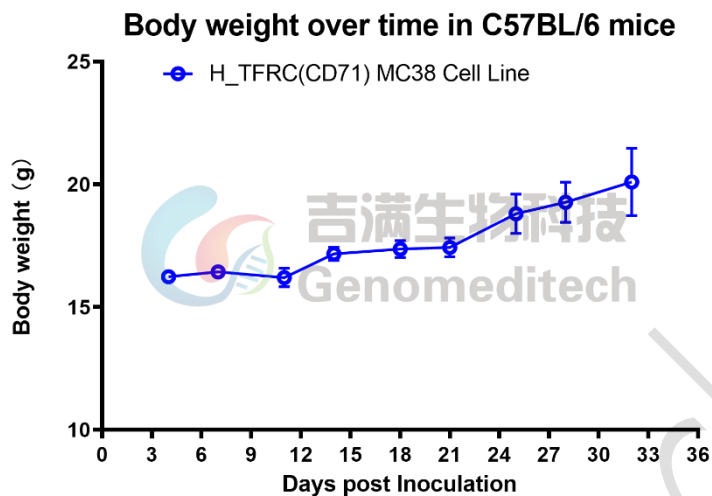


Figure 3 | Body weight changes after implantation of H_TFRC(CD71) MC38 in C57BL/6 mice. Under the same conditions, body weight was measured twice per week and is presented as mean \pm SEM.

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.

- 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.
- 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.
- Resuspend cell pellet with the recommended recovery medium. And dispense into appropriate culture dishes.
- 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

- Centrifuge at $176 \times g$ for 3 minutes to collect cells.
- Resuspend the cells in pre-cooled freezing medium and adjust the cell density to 5×10^6 cells/mL.
- 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 $\mu\text{g/mL}$ Puromycin

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

- Remove and discard culture medium.
- Briefly rinse the cell layer with PBS to remove all traces of serum that contains trypsin inhibitor.
- 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).
- 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.
- Add 2.0 mL of growth medium to mix well and aspirate cells by gently pipetting.
- After centrifugation, resuspend the pellet and add appropriate aliquots of the cell suspension to new culture vessels.
- 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

- 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

TFRC(CD71) [P02786](#)

MMDQARSAFSNLFGGEPLSYTRFSLARQVDGDNHSHVEMKLAVDEEENADNNTKANVTKPKRCSGSICYGTI
AVIVFFLIGFMIGYLG YCKGVEPKTECERLAGTESPVREEPGEDFPAARRLYWDDLKRKLSEKLDSTDFTGTI
KLLNENSYVPREAGSQKDENLALYVENQFREFKLSKVWRDQHFVKIQVKDSAQNSVIIVDKNGRLVYLVEN
PGGYVAYSKAATVTGKL VHANFGTKKDFEDLYTPVNGSIVIVRAGKITFAEKVANAESLNAIGVLIYMDQTK
FPIVNAELSFHGAHLGTGDPYTPGFPSFNHTQFPSSRSGLPNIPVQTISRAAAEKLFGNMEGDCPSDWKTDS
TCRMVTSESKNVKLTVSNVLKEIKILNIFGVIKGFVEPDHYVVVGAQRDAWGPGAAGSGVGTALLLKLQAM
FSDMVLKDGFPQRSIIIFASWSAGDFGSVGATEWLEGYLSSLHLKAFTYINLDKAVLGTSNFKVSASPLLYTLI
EKTMQNVKHPVTGQFLYQDSNWASKVEKLTLDNAAFPFLAYSGIPAVSFCFCEDTDYPYLGTTMDTYKELIE
RIPELNKVARAAAEVAGQFVIKLT HDVELNLDYERYNSQLLSFVRDLNQYRADIKEMGLSLQWLYSARGDFF
RATSRLTTDFGNAEKTDRFVMKKLNDRVMRVEYHFLSPYVSPKESPF RHVFWGSGSHTLPALLENLKL RKQ
NNGAFNETLFRNQLALATWTIQGAANALSGDVWDIDNEF

Related Products

| CD71(TFRC) | |
|--|--|
| Cynomolgus_TFRC(CD71) CHO-K1 Cell Line | H_TFRC(CD71) CHO-K1 Cell Line |
| H_TFRC(CD71) HEK-293 Cell Line | |
| Anti-H_TFRC(CD71) hIgG1 Antibody(Pabinafusp) | |
| In Vivo MAb Isotype Controls | |
| Biotinylated Human IgE Isotype Control; His-Avi Tag (Anti-RSV) | Human IgG1 (K214R) Isotype Control(Anti-HEL) |
| Human IgG1 (K214R;D356E;L358M) Isotype Control(Anti-HEL) | Human IgG1 (KRLALAGA) Isotype Control(Anti-HEL) |
| Human IgG1 Isotype Control(Anti-HEL) | Human IgG1 Isotype Control(Anti-RSV) |
| Human IgG1 Isotype Control(MOPC-21) | Human IgG1(LALA) Isotype Control(Anti-HEL) |
| Human IgG1(LALAPG) Isotype Control(Anti-HEL) | Human IgG1(LALAPG;N297A) Isotype Control(Anti-HEL) |
| Human IgG1(N297A) Isotype Control(Anti-HEL) | Human IgG4(S228P) Isotype Control(Anti-HEL) |
| Mouse IgG1 (D265A) Isotype Control(Anti-HEL) | Mouse IgG1 Isotype Control(Anti-HEL) |
| Mouse IgG2a Isotype Control(Anti-HEL) | Mouse IgG2a Isotype Control(Anti-RSV) |
| Mouse IgG2a(D265A) Isotype Control(Anti-HEL) | Mouse IgG2b Isotype Control(Anti-HEL) |
| Rat IgG1 Isotype Control(Anti-HEL) | |

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