

Product Sheet

H_αvβ6 MC38 Cell Line

Catalog number: GM-C31429

Version 3.3.1.251104

Description	H_αvβ6 MC38 Cell Line is a clonal stable MC38 cell line that constitutively expresses the human ITGAV and human ITGB6 genes, 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_ITGAV & Human_ITGB6
Gene ID/Uniprot ID	P06756-1 & P18564-1
Host Cell	MC38
Recovery Medium	DMEM+10% FBS+1% P.S
Growth medium	DMEM+10% FBS+1% P.S+500 µg/mL Bleomycin+200 µg/mL Hygromycin
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
Bleomycin	Genomeditech/ GM-040407
Hygromycin	Genomeditech/ GM-040403
Anti- α v hIgG2 Antibody(Abituzumab)	Genomeditech/ GM-49298AB
Anti- α v β 6 hIgG1 Antibody(m15H3)	Genomeditech/ GM-53193AB

Figures

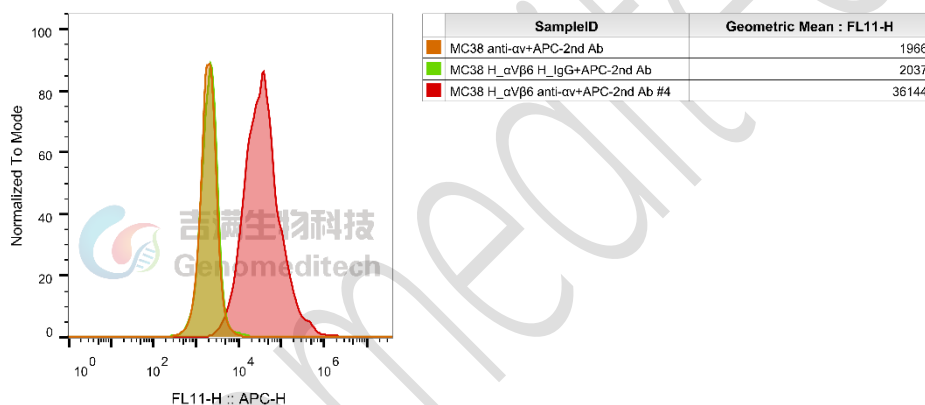


Figure 1 | H_ α v β 6 MC38 Cell Line (Cat. GM-C31429) was determined by flow cytometry using Anti- α v hIgG2 Antibody(Abituzumab) (Cat. [GM-49298AB](#))

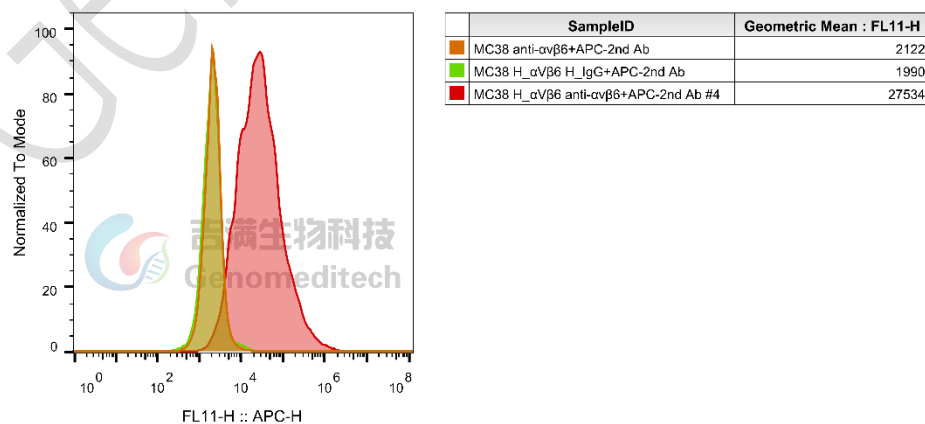


Figure 2 | H_ α v β 6 MC38 Cell Line (Cat. GM-C31429) was determined by flow cytometry using Anti- α v β 6 hIgG1 Antibody(m15H3) (Cat. [GM-53193AB](#))

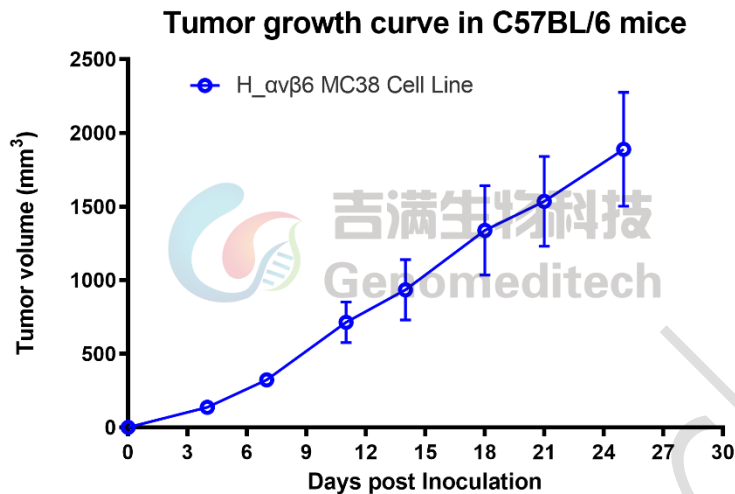


Figure 3 | Tumor growth curves of H_αvβ6 MC38 in C57BL/6 mice. H_αvβ6 MC38 cells (1×10^6 per mouse) were subcutaneously inoculated into C57BL/6 mice (female, 8 weeks old, $n = 3$). Tumor volume was measured twice per week and is presented as mean \pm SEM.

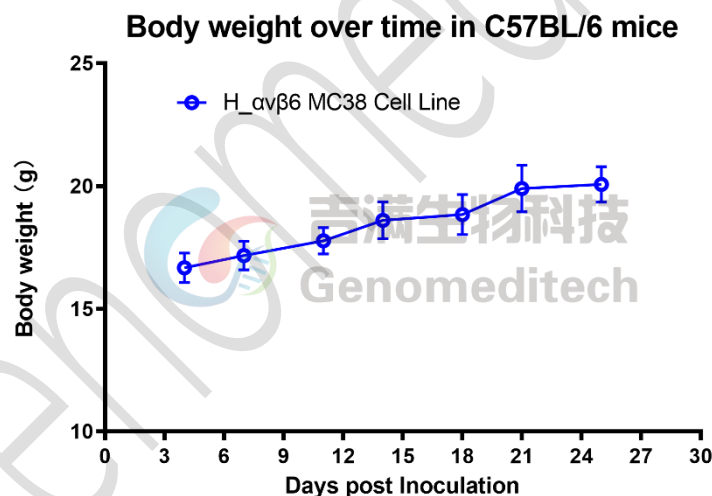


Figure 4 | Body weight changes after implantation of H_αvβ6 MC38 in C57BL/6 mice. Under the same conditions, body weight was measured twice per week and is presented as mean \pm SEM.

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 x 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% CO₂ 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 x g for 3 minutes to collect cells.
- Resuspend the cells in pre-cooled freezing medium and adjust the cell density to 5E6 cells/mL.
- Aliquot 1 mL into each vial.
- 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+500 µg/mL Bleomycin+200 µg/mL Hygromycin

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

ITGAV [P06756-1](#)

MAFPPRRRLRLGPRGLPLLLSGLLLPLCRAFNLVDSPA EYSGPEGSYFGFAVDFFVPSASSRMFLLVGAPKA
NTTQPGIVEGGQVLKCDWSSSTRRCQPIEFDATGNRDYAKDDPLEFKSHQWFGASVRSKQDKILACAPLYHW
RTEMKQEREPVGTCTFLQDGTKTVEYAPCRSQDIDADGQGFCQGGFSIDFTKADRVLGGPGSFYWQGLISD
QVAEIVSKYDPNVYSIKYNNQLATRTAQAIFFDDSYLGYSVAVGDFNGDGIDDFVSGVPRAARTLGMVYIYDG
KNMSSLYNFTGEQMAAYFGFSVAATDINGDDYADVFIGAPLFMDRGSDGKLQEVGQVSVSLQRASGDFQTT
KLNGFEVFARFGSAIAPLGDLDQDGFNDIAIAAPYGGEDKKGIVYIFNGRSTGLNAVPSQILEGQWAARSMPP
SFGYSMKGATDIDKNGYPDLIVGAFGVDRAILYRARPVITVNAGLEVYPSILNQDNKTCSLPGTALKVSCFNV
RFCLKADGKGVLPRKLNQVELLLDKLKQKGAIRRALFLYSRSPSHSKNMTISRGGMLMQCEELIAYLRDESEF
RDKLTPITIFMEYRLDYRTAADTTGLQPILNQFTPANISRQAHIILLDCGEDNVCKPKLEVSVDSDQKKIYIGDD
NPLTLIVKAQNQGEGAYEAEIVSIPLQADFIGVVRNNEALARLSCAFKTENQTRQVVCDLGNPMKAGTQLL
AGLRFSVHQQSEMDTSVKFDLQIQSSNLFDKVSPVVSHKVDLAVLA AVEIRGVSSPDHVFPLIPNWEHKENPE
TEEDVGPVVQHIYELRNNGPSSFSKAMLHLQWPYKYNNTLLYILHYDIDGPMNCTSDMEINPLRIKISSLQT
TEKNDTVAGQGERDHLITKRDLALSEGDIHTLGCGVAQCLKIVCQVGRDRGKSAILYVKSLWTETFMNKE
NQNHSSYLSKSSASFNVIEFPYKNLPIEDITNSTLVTNTVTWGIQAPMPVPVWVILAVLAGLLLLAVLVFVMY
RMGFFKRVPPQEEQEREQLQPHENGEGNSET

ITGB6 [P18564-1](#)

MGIELLCLFFLFLGRNDHVQGGCALGGAETCEDCLLIGPQCAWCAQENFTHPSGVGERCDTPANLLAKGCQL
NFIENPVSQVEILKNKPLSVGRQKNSSDIVQIAPQSLILKLRPGGAQTLQVHVRQTEDYPVDLYYLMDSLASM
DDDLNTIKELGSRLSKEMSKLTSNFRLLGFGSFVEKPVSPFVKTTPEEIANPCSSIPYFCLPTFGFKHILPLTND AE
RFNEIVKNQKISANIDTPEGGFDAIMQAAVCKEKIGWRNDSLHLLV FVSDADSHFGMDSKLAGIVIPNDGLCH
LDSKNEYSMSTVLEYPTIGQLIDKL VQNNVLLIFA VTQEQVHLYENYAKLIPGATVGLLQKDSGNILQLIISAY
EELRSEVELEVLGDTEGLNLSFTAICNNGTLFQHQQKCSHMKVGD TASFSVTVNIPH CERRSRHIIPVGLGD
ALELLVSPECNCDCQKEVEVNSSKCHHGNGSFQCGVCACHPGHMGRCECGEDMLSTDSCKEAPDHPSCSG
RGDCYCGQCICHLSPYGNIGPYCQCDNFSCVRHKGLLCGGNGDCDCGECVCRSGWTGEYCNCTTSTDSCV
SEDGVLCSGRGDCVCGKCVCTNPGASGPTCERCPTCGDPCNSKRSCIECHLSAAGQAREECVDKCKLAGATI
SEEDFSKDGSVSCSLQGENECLITFLITTDNEGKTHHSINEKDCPKPPNIPMIMLGVS LAILLIGVVLLCIWKLL
VSFHDRKEVAKFEAERSKAKWQTGTNPLYRGSTSTFKNVTYKHREKQKVLDLSTDC

Related Products

TGF-β:GARP:avβ6	
H_GARP Latent TGFB1 Reporter HEK-293 Cell Line	TGF-β Reporter 293 DDX35TM Cell Line
TGF-β Reporter HEK-293 Cell Line	Cynomolgus_ITGB6 HEK-293 Cell Line
Cynomolgus_αvβ6 HEK-293 Cell Line	H_GARP HEK-293 Cell Line
H_GARP Latent TGF-β1 CHO-K1 Cell Line	H_GARP Latent TGF-β1 HEK-293 Cell Line
H_ITGB6 CHO-K1 Cell Line	H_ITGB6 HEK-293 Cell Line
H_ITGB6 NIH-3T3 Cell Line	H_αvβ6 CT26 Cell Line
H_αvβ6 HEK-293 Cell Line	H_αvβ6 LLC1 Cell Line
Anti-GARP-TGF-β1 hIgG4 Antibody(ARGX-115)	Anti-ITGB6 hIgG1 Antibody(SGN-B6A)

Anti-TGFB1 hIgG4 Antibody(SRK-181)	Anti- α v hIgG2 Antibody(Abituzumab)
Anti- α v β 6 hIgG1 Antibody(m15H3)	Anti-ITGB6-MMAE ADC(Dar4)[SGN-B6A]
ADC Related Product	
Anti-DXD Mouse IgG1 Antibody (23E21C5)	Anti-DXD Mouse IgG1 Antibody (4A5A12)
Anti-Dxd Mouse IgG2a Antibody (17D6A4)	Anti-Eribulin Mouse IgG2a Antibody (10F8G4)
Anti-MMAE Mouse IgG1 Antibody (11C10E3)	Anti-MMAE Mouse IgG2a Antibody (17A1K11)
Anti-MMAE Mouse IgG2a Antibody (8F6A3)	Mouse anti Human IgG1-MMAE(Dar4)
Human IgG1 Isotype-DXD (Dar8)	Human IgG1 Isotype-Eribulin (Dar4)
Human IgG1 Isotype-MMAE (Dar4)	
Recombinant DT3C Protein	

License Agreement:

By purchasing and using this cell line product, the user voluntarily agrees to accept and abide by the following policies:

- This cell line product is restricted to research use only and shall not be used for any commercial purposes.
- This product is strictly prohibited from being used in the diagnosis or treatment of human or animal diseases, and shall not be directly used in experiments involving humans.
- Users and their contractors engaged for their benefit may use this material and its derivatives only within the agreed research scope; modification of the material is not permitted, nor may it be distributed, sold, transferred, or otherwise provided to any other entity (including affiliates).
- If use beyond the above scope is required, prior written permission from Genomeditech (Shanghai) Co.,Ltd. must be obtained. For details, please contact Genomeditech (Shanghai) Co.,Ltd.