Genomeditech (Shanghai) Co.,Ltd.
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Product Sheet

H_PDL1 MC38(mouse PDL1 KO) Cell Line

Catalog number: GM-C20064

Version 3.3.1.260320

Description	H_PDL1 MC38(mouse PDL1 KO) Cell Line is a clonal stable MC38 cell line that constitutively expresses human PDL1 gene, constructed using lentiviral technology. It is developed on a foundation of MC38 cells with a knockout of mouse PDL1.
Quantity	5E6 Cells per vial,1 mL
Product Format	1 vials of frozen cells
Shipping	Shipped on dry ice
Storage Conditions	Liquid nitrogen immediately upon receipt

Target	Human_PDL1
Gene ID/Uniprot ID	NP_054862.1
Host Cell	MC38

Recovery Medium	DMEM+10% FBS+1% P.S
Growth medium	DMEM+10% FBS+1% P.S+2 μg/mL Blasticidin+200 μg/mL Hygromycin+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.

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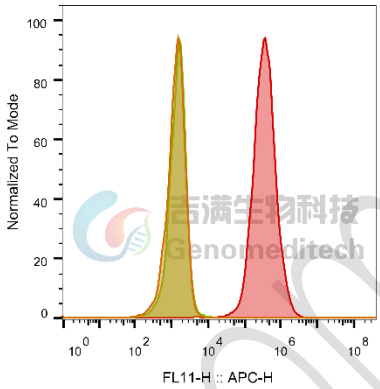
Materials

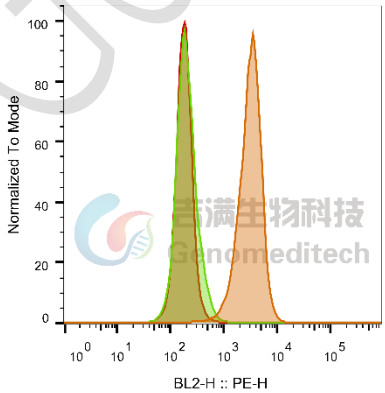
Reagent	Manufacturer/Catalogue No.
DMEM	VivaCell/C3110-0500
Fetal Bovine Serum	ExCell/FSP500
Pen/Strep	Thermo/15140-122
Blasticidin	Genomeditech/GM-040404
Hygromycin	Genomeditech/GM-040403
Puromycin	Genomeditech/GM-040401
Anti-H_PDL1 hIgG1 Reference Antibody(Atezbio)	Genomeditech/GM-86854MAB
PE anti-mouse CD274 (B7-H1, PD-L1) Antibody	BioLegend/124307

Figures



SampleID	Geometric Mean : FL11-H
MC38 anti-PDL1+APC-2nd Ab	1259
MC38(mouse PDL1 KO) H_PDL1 H_IgG+APC-2nd Ab	1424
MC38(mouse PDL1 KO) H_PDL1 anti-PDL1+APC-2nd Ab	342064

Figure 1 | H_PDL1 MC38(mouse PDL1 KO) Cell Line (Cat. GM-C20064) was determined by flow cytometry using Anti-H_PDL1 hIgG1 Reference Antibody(Atezbio) (Cat. GM-86854MAB).



SampleID	Geometric Mean : BL2-H
Mouse_IFN-γ MC38 PE-anti-M_PDL1	3005
Mouse_IFN-γ MC38 Mouse_PDL1 KO PE-R_IgG	200
Mouse_IFN-γ MC38 Mouse_PDL1 KO PE-anti-M_PDL1	180

Figure 2 | H_PDL1 MC38(mouse PDL1 KO) Cell Line (Cat. GM-C20064) was determined by flow cytometry using PE anti-mouse CD274 (B7-H1, PD-L1) Antibody(BioLegend/124307).

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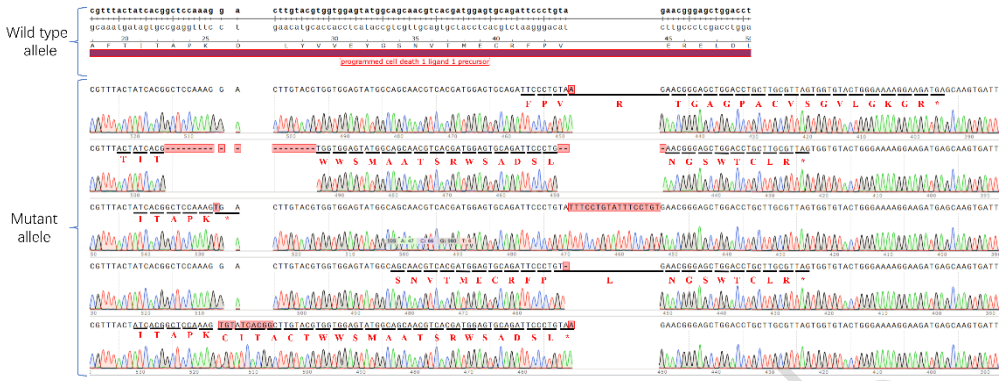

Figure 3 | The Sanger sequencing of the H_PDL1 MC38(mouse PDL1 KO) Cell Line showed successful knockout of mouse PDL1.

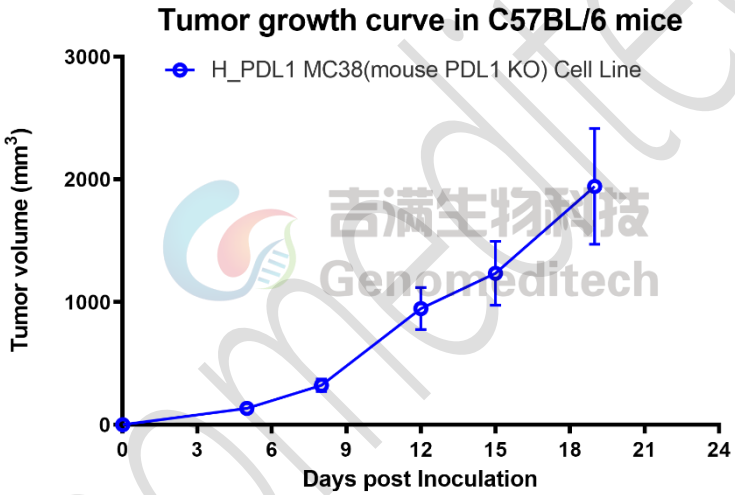

Figure 4 | Tumor growth curves of H_PDL1 MC38(mouse PDL1 KO) in C57BL/6 mice.H_PDL1 MC38(mouse PDL1 KO) cells (1×10^6 per mouse) were subcutaneously inoculated into C57BL/6 mice (female, 8 weeks old, n = 3). Tumor volume was measured twice per week and is presented as mean ± SEM.

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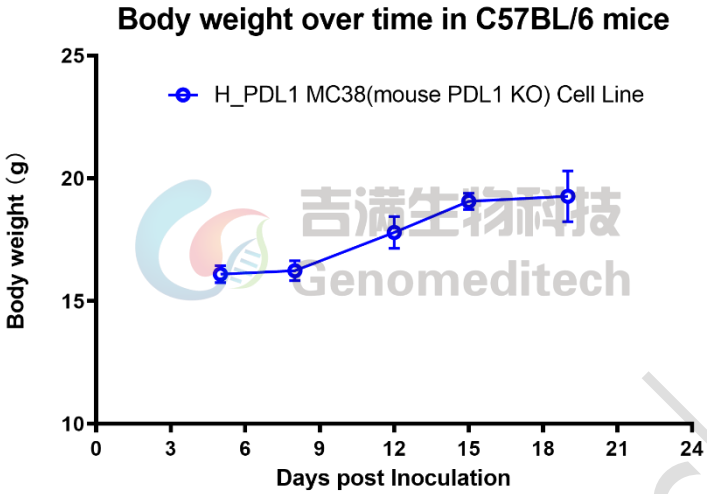

Figure 5 | Body weight changes after implantation of H_PDL1 MC38(mouse PDL1 KO) in C57BL/6 mice. Under the same conditions, body weight was measured twice per week and is presented as mean ± SEM.

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% 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.

Cell passage

Growth medium: DMEM+10% FBS+1% P.S+2 μg/mL Blasticidin+200 μg/mL Hygromycin+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

CD274(PD-L1) NP_054862.1

MRIFAVFIFMTYWHLLNAFTVTVPKDLYVVEYGSNMTIECKFPVEKQLDLAALIVYWEMEDKNIIQFVHGEE
DLKVQHSSYRQRARLLKDQLSLGNAALQITDVKLQDAGVYRCMISYGGADYKRITVKVNAPYNKINQRILV
VDPVTSEHELTCQAEGYPKAEVIWTSSDHQVLSGKTTTTNSKREEKLFNVTSTLRINTTTNEIFYCTFRRLDPE
ENHTAELVIPELPLAHPPNERTHLVILGAILLCLGVALTFIFRLRKGRMMDVKKCGIQDTNSKKQSDTHLEET*

Related Products

PD-1:PD-L1(B7-H1):PDL2	
Mouse_PDL1 KO CT26 Cell Line	Mouse_PDL1 KO LLC1 Cell Line
Mouse_PDL1 KO MC38 Cell Line	aAPC(OKT3) PDL1 CHO-K1 Cell Line
H_PD-1 Reporter Jurkat Cell Line	H_PD1 SHP1 Reporter Jurkat Cell line
H_PD1 SHP2 Reporter Jurkat Cell line	H_PDCD1LG2(PDL2) aAPC CHO-K1 Cell Line
Mouse PDL1 aAPC CHO-K1 Cell Line	Mouse_PD-1 Reporter Jurkat Cell Line

Canine_PD-1 CHO-K1 Cell Line	Canine_PD-1 HEK-293 Cell Line
Cynomolgus_PD1 CHO-K1 Cell Line	Cynomolgus_PD-L1 HEK-293 Cell Line
H_CD274(PD-L1) CHO-K1 Cell Line	H_CD274(PD-L1) MC38 Cell Line
H_PDCD1(PD-1) CHO-K1 Cell Line	H_PDCD1(PD-1) CHO-K1 Cell Line (Low Expression)
H_PDCD1(PD-1) HEK-293 Cell Line	H_PDCD1LG2(PDL2) CHO-K1 Cell Line
H_PDL1 CT26(mouse PDL1 KO) Cell Line	H_PD-L1 HEK-293 Cell Line
H_PDL1 LLC1(mouse_PDL1 KO) Cell Line	H_PDL1 LLC1(mouse_PDL1 KO) Cell Line
H_PD-L1 Raji Cell Line	M_PDCD1(PD-1) CHO-K1 Cell Line
Rhesus_PDCD1(PD-1) CHO-K1 Cell Line	
Anti-Canine_PD1 mIgG2a Antibody(4F12-E6)	Anti-CTLA-4/PD-1 hIgG1 Bispecific Antibody(Cadonilimab)
Anti-CTLA4×PD-1 hIgG1 Reference Antibody (Cadbio)	Anti-H_CD274(PDL1) hIgG1 Antibody(Atezolizumab)
Anti-H_PDCD1(PD1) hIgG1 Antibody(Budigalimab)	Anti-H_PDCD1LG2 mIgG1 Antibody(3G2)
Anti-H_PDL1 hIgG1 Reference Antibody(Atezbio)	Anti-mouse PD1 RIgG2a Antibody(RMP1-14)
Anti-mouse PD-L1 mIgG1 Antibody(10F.9G2)	Anti-Mouse_PD1 mIgG1 Antibody(29F.1A12)
Anti-mouse_PD1 mIgG1 Antibody(RMP1-14)	Anti-Mouse_PD1×VEGF hIgG1 Bispecific Antibody
Anti-PD1 hIgG1 Antibody(Pembrolizumab)	Anti-PD1 hIgG1 Reference Antibody (Perbio)
Anti-PD1 hIgG1 Reference Antibody(Rosnbio)	Anti-PD1 hIgG4 Antibody(Pembrolizumab)
Anti-PD1 hIgG4 Reference Antibody (Nivbio)	Anti-PD1 hIgG4 Reference Antibody (Pembio)
Anti-PD1 hIgG4 Reference Antibody (Sintbio)	Anti-PD-1 hIgG4 Reference Antibody (Torbio)
Anti-PD1 hIgG4 Reference Antibody(Cambio)	Anti-PD-1 hIgG4 Reference Antibody(Tislbio)
Anti-PD1 mIgG2b Antibody(Pembrolizumab)	Anti-PD1-IL2v Fusion hIgG1 Antibody(2149)
Anti-PD1-IL2v Fusion hIgG1 Antibody(KY-0118)	Anti-PD-L1 hIgG1 Reference Antibody(Avebio)
Anti-PDL1 hIgG4 Reference Antibody(Adebio)	Anti-PD-L2 hIgG1 Antibody(Hz25G4-1.1)
Anti-VEGF×PD1 hIgG1 Reference Antibody (Ivobio)	Anti-VEGF×PD-L1 hIgG1 Bispecific Antibody (Pumibio)
Anti-VEGF×PD-L1 hIgG1 Bispecific Antibody (pumitamig)	
Biotinylated Human PD1 Protein; His-Avi Tag	Biotinylated Human PDL1 Protein; His-Avi Tag
Canine PD1 Protein; hFc Tag	Cynomolgus PDL1 Protein; His Tag
Human PD1 Protein; hFc Tag	Human PD1 Protein; His Tag
Human PDL1 Protein; His Tag	Human PDL1 Protein; mFc Tag
Human PDL2 Protein; mFc Tag	Mouse PDL1 Protein; His Tag
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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