Genomeditech (Shanghai) Co.,Ltd.
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Product Sheet

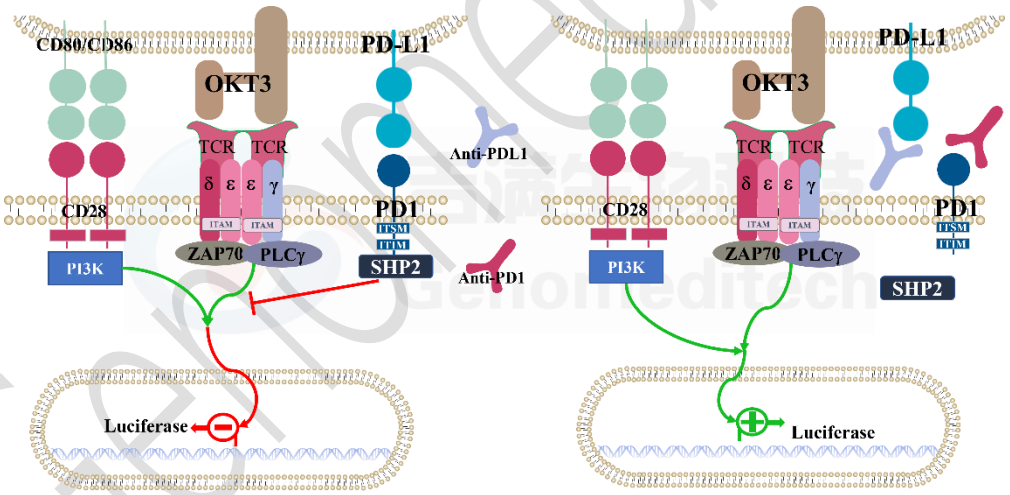
Mouse PDL1 aAPC CHO-K1 Cell Line

Catalog number: GM-C25791

Version 3.3.1.241128

PD-1 is an immunosuppressive receptor on activated T and B cells, essential for regulating immune responses to tumor antibodies and self-antigens. Its interaction with ligands PD-L1 or PD-L2 inhibits TCR signaling, affecting cell proliferation, transcriptional activation, and cytokine production. Therapeutic antibodies and Fc fusion proteins blocking this interaction have shown promise in cancer clinical trials.

The Mouse PDL1 aAPC CHO-K1 Cell Line is a clonal stable CHO-K1 cell line constructed using lentiviral technology, constitutive expression of the OKT3 and mouse PD-L1 gene. Mouse_PD-1 Reporter Jurkat Cell Line (Cat. GM-C25661) is another stable clonal cell line that expresses the mouse PD-1 gene, along with signal-dependent expression of a luciferase reporter gene. Co-culturing these cells inhibits TCR signaling and luciferase expression due to the PD-1/PD-L1 interaction. Adding antibodies that block this interaction relieves the inhibition, allowing TCR signaling and luciferase expression to resume. This setup can assess the efficacy and stability of antibodies and biologics that block the PD-1/PD-L1 interaction.



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Specifications

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
Recovery Medium	F12K+10% FBS+1% P.S
Growth medium	F12K+10% FBS+1% P.S+4 μg/mL Blasticidin+4 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.
F12K	BOSTER/PYG0036
Fetal Bovine Serum	Cegrogen biotech/A0500-3010
Pen/Strep	Thermo/15140-122
Blasticidin	Genomeditech/GM-040404
Puromycin	Genomeditech/GM-040401
Anti-H_CD274(PDL1) hIgG1 Antibody(Atezolizumab)	Genomeditech/GM-31740AB

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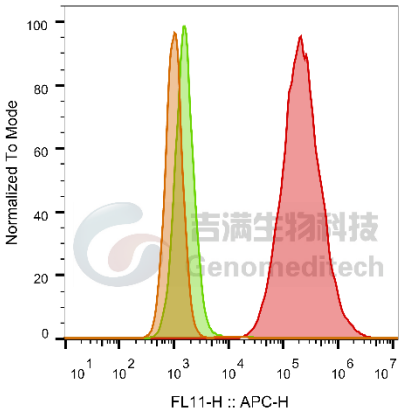
Figures



SampleID	Geometric Mean : FL11-H
CHO-K1 anti-PDL1+APC-2nd Ab	1066
CHO-K1 Mouse_PDL1 H_IgG+APC-2nd Ab	1651
CHO-K1 Mouse_PDL1 anti-PDL1+APC-2nd Ab	214588

Figure 1 | Mouse PDL1 aAPC CHO-K1 Cell Line (Cat. GM-C25791) was determined by flow cytometry using Anti-H_CD274(PDL1) hIgG1 Antibody(Atezolizumab) (Cat. GM-31740AB).

Cell Recovery

Recovery Medium: F12K+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.

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Cell passage

Growth medium: F12K+10% FBS+1% P.S+4 μg/mL Blasticidin+4 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 2 to 3 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 1:4 - 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.

Related Products

PD-1:PD-L1(B7-H1):PDL2	
Mouse_PDL1 KO MC38 Cell Line	aAPC(OKT3) PDL1 CHO-K1 Cell Line
H_PD-1 Reporter Jurkat Cell Line	H_PDCD1LG2(PDL2) aAPC CHO-K1 Cell Line
Mouse_PD-1 Reporter Jurkat Cell Line	Canine_PD-1 HEK-293 Cell Line
Cynomolgus_PD1 CHO-K1 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_PDCD1LG2(PDL2) CHO-K1 Cell Line	H_PD-L1 HEK-293 Cell Line
H_PDL1 LLC1(mouse_PDL1 KO) Cell Line	H_PDL1 MC38(mouse PDL1 KO) Cell Line
H_PD-L1 Raji Cell Line	M_PDCD1(PD-1) CHO-K1 Cell Line
Anti-Canine_PD1 mIgG2a Antibody(4F12-E6)	Anti-H_CD274(PDL1) hIgG1 Antibody(Atezolizumab)
Anti-H_PDCD1(PD1) hIgG1 Antibody(Budigalimab)	Anti-H_PDCD1LG2 mIgG1 Antibody(3G2)
Anti-mouse PD-L1 mIgG1 Antibody(10F.9G2)	Anti-mouse_PD1 mIgG1 Antibody(RMP1-14)
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-PDL1 hIgG4 Reference Antibody(Adebio)

Anti-PD-L2 hIgG1 Antibody(Hz25G4-1.1)	
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; His Tag	Human PDL1 Protein; His Tag

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