Genomeditech (Shanghai) Co.,Ltd.
Order: +86 021-68455258/50432826/50432825
Toll-free: +86 400 627 9288
Email: service@genomeditech.com

Product Sheet

Mouse_FcgRIV FcgRIIb aAPC CHO-K1 Cell Line

Catalog number: GM-C40207

Version 3.3.1.250717

Description	Mouse_FcgRIV FcgRIIb aAPC CHO-K1 Cell Line is a clonal stable CHO-K1 cell line that constitutively expresses the mouse FcgRIV and FcgRIIb 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	Mouse_FcgRIV & Mouse_FcgRIIb
Gene ID/Uniprot ID	A0A0B4J1G0 & P08101-1
Host Cell	CHO-K1
Recovery Medium	F12K+10% FBS+1% P.S
Growth medium	F12K+10% FBS+1% P.S+4 μg/mL Blasticidin+100 μg/mL Hygromycin+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.

Genomeditech (Shanghai) Co.,Ltd.
Order: +86 021-68455258/50432826/50432825
Toll-free: +86 400 627 9288
Email: service@genomeditech.com

Materials

Reagent	Manufacturer/Catalogue No.
F12K	BOSTER/PYG0036
Fetal Bovine Serum	ExCell/FSP500
Pen/Strep	Thermo/15140-122
Blasticidin	Genomeditech/GM-040404
Hygromycin	Genomeditech/GM-040403
Puromycin	Genomeditech/GM-040401
APC anti-mouse CD16.2 (FcγRIV) Antibody	Biolegend/149505
FITC anti-mouse CD32 (Fcgr2) Antibody	Biolegend/156407
H_PD-1 Reporter Jurkat Cell Line	Genomeditech/GM-C07928
Anti-PD1 mIgG1 Antibody(Rosnilimab)	Genomeditech/GM-87955AB
Anti-PD1 mIgG2a Antibody(Rosnilimab)	Genomeditech/GM-87956AB
Anti-PD1 mIgG2b Antibody(Rosnilimab)	Genomeditech/GM-87957AB
GMOne-Step 2.0 Luciferase Reporter Gene Assay Kit	Genomeditech/GM-040513

Figures

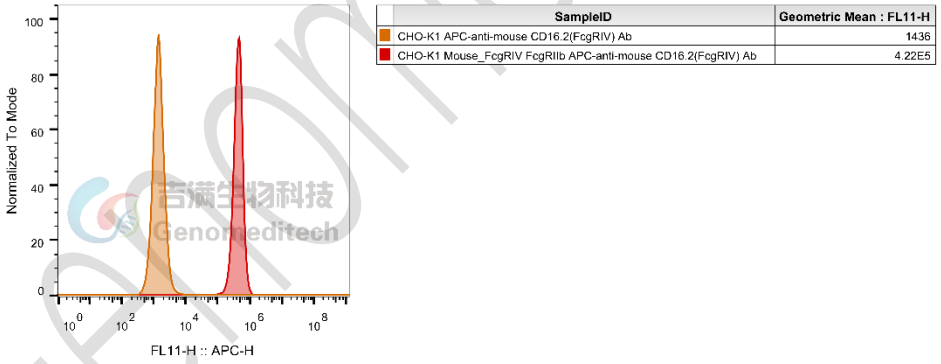
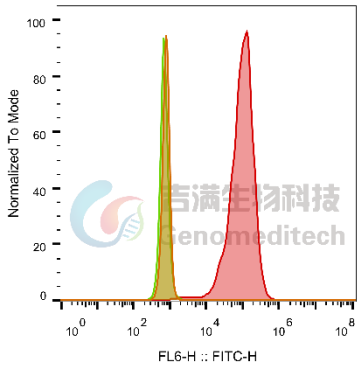


Figure 1 | Mouse_FcgRIV FcgRIIb aAPC CHO-K1 Cell Line (Cat. GM-C40207) was determined by flow cytometry using APC anti-mouse CD16.2 (FcγRIV) Antibody (Biolegend/149505).



SampleID	Geometric Mean : FL11-H
CHO-K1 FITC-anti-mouse CD32(FcgRII) Ab	746
CHO-K1 Mouse_FcgRIV FcgRIIb FITC-anti-Rat IgG Ab	529
CHO-K1 Mouse_FcgRIV FcgRIIb FITC-anti-mouse CD32(FcgRII) Ab	494

Figure 2 | Mouse_FcgRIV FcgRIIb aAPC CHO-K1 Cell Line (Cat. GM-C40207) was determined by flow cytometry using FITC anti-mouse CD32 (Fcgr2) Antibody (Biolegend/156407).

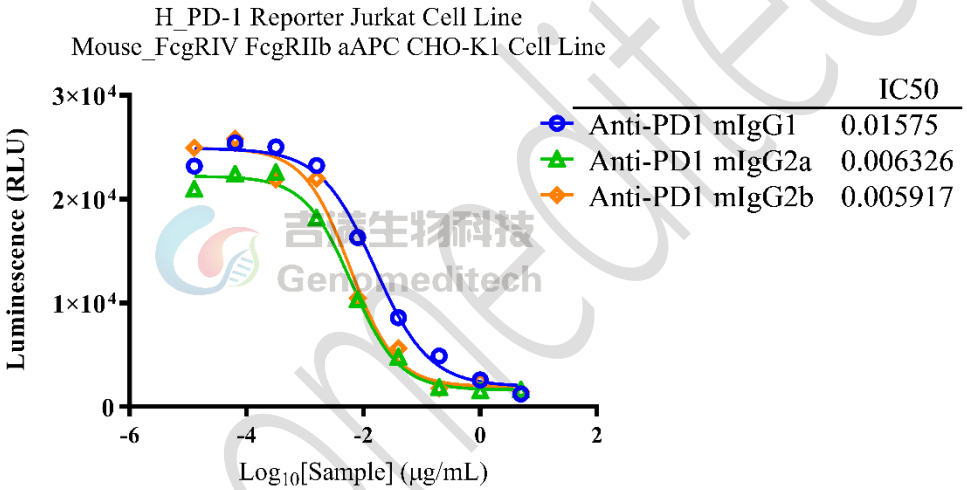


Figure 3 | Response to Anti-PD1 mIgG2a Antibody(Rosnilimab). Serial dilutions of the Anti-PD1 mIgG1/mIgG2a/mIgG2b Antibody(Rosnilimab) (Cat. GM-87955AB、GM-87956AB、GM-87957AB) and 1E5 cells/well of the H_PD-1 Reporter Jurkat Cell Line (Cat. GM-C07928) were added to 1E4 cells/well of Mouse_FcgRIV FcgRIIb aAPC CHO-K1 Cell Line (Cat. GM-C40207) for 6 hours. Firefly luciferase activity is then measured using the GMOne-Step 2.0 Luciferase Reporter Gene Assay Kit (Cat. GM-040513). The maximum induction folds were separately[21.03, 17.22, 21.93]. Data are shown by drug mass concentration.

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.

Cell passage

Growth medium: F12K+10% FBS+1% P.S+4 μg/mL Blasticidin+100 μg/mL Hygromycin+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.

Sequence

FcgRIV A0A0B4J1G0
MWQLLLPTALVLTAFSGIQAGLQKAVVNLDPKWVRVLEEDSVTLRCQGTFSPEDNSIKWFHNESLIPHQDAN
YVIQSARVKDSGMYRCQTALSTISDPVQLEVHMGWLLLQTTKWLFQEGDPIHLRCHSWQNRPVRKVTYLQN
GKGKKYFHENSELLIPKATHNDSGSYFCRGLIGHNNKSSASFRISLGDPGSPSMFPPWHQITFCLLIGLLFAIDT
VLYFSVRRGLQSPVADYEEPKIQWSKEPQDK*

Fcgr2b P08101-1
MESNWTVHVFSRTLCHMLLWTAVLNLAAGTHDLPKAVVKLEPPWIQVLKEDTVTLTCEGTHNPGNSSTQW
FHNGRSIRSQVQASYTFKATVNDSGEYRCQMEQTRLSDPVDLGVISDWLLLQTPQLVFLEGETITLRCHSWR
NKLLNRISFFHNEKSVRYHHYSSNFSIPKANHSHSGDYYCKGSLGRTLHQSKPVTITVQGPKSSRSLPVLTIVA
AVTGIAVAAIVIILVSLVYLKKKQVPALPGNPDHREMGETLPEEVGEYRQPSGGSVPVSPGPPSGLEPTSSSPY
NPPDLEEAAKTEAENTITYSLLKHPEALDEETEHDYQNHI*

Related Products

FcγR	
H_CD32B aAPC CHO-K1 Cell Line	Cynomolgus_FcRn MDCK Cell Line
H_FCGR1A(CD64) CHO-K1 Cell Line	H_FCGR1A(CD64) HEK-293 Cell Line
H_FCGR2A(CD32A) CHO-K1 Cell Line	H_FCGR2B(CD32B) CHO-K1 Cell Line
H_FCGR3A(CD16a) 158F CHO-K1 Cell Line	H_FCGR3A(CD16a) 158V CHO-K1 Cell Line
H_FCGR3B(CD16b) CHO-K1 Cell Line	H_FcRn CHO-K1 Cell Line
H_FcRn MDCK Cell Line	Mouse_FcRn MDCK Cell Line
Anti-FcRn hIgG4 Reference Antibody(Rozabio)	Anti-H_FcRn IgG4 Antibody(Rozanolixizumab)
Anti-Mouse CD1632 mIgG2b Antibody(2.4G2)	
ADCCP	
ADCC FcγRIIIa(158F) Jurkat Effector Cell Line	ADCC FcγRIIIa(158V) DDX35TM Jurkat Effector Cell Line
ADCC FcγRIIIa(158V) Jurkat Effector Cell Line	ADCC M_FcγRIV Jurkat Effector Cell Line
ADCP FcγRI Jurkat Effector Cell Line	ADCP FcγRIIa DDX35TM Jurkat Effector Cell Line
ADCP FcγRIIa Jurkat Effector Cell Line	ADCP FcγRIIa R131 Jurkat Effector Cell Line
ADCP FcγRIIb Jurkat Effector Cell Line	

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.

Genomeditech (Shanghai) Co.,Ltd.
Order: +86 021-68455258/50432826/50432825
Toll-free: +86 400 627 9288
Email: service@genomeditech.com

- 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.