

Product Sheet

H_αEβ7 K562 Cell Line

Catalog number: GM-C35354

Version 3.3.1.260602

Description	H_αEβ7 K562 Cell Line is a clonal stable K562 Cell Line that constitutively expresses the Human ITGAE and ITGB7 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_ITGAE & Human_ITGB7
Gene ID/Uniprot ID	P38570 & P26010
Host Cell	K562
Recovery Medium	RPMI 1640+10% FBS+1% P.S
Growth medium	RPMI 1640+10% FBS+1% P.S+0.75 μg/mL Puromycin
Note	None
Freezing Medium	90% FBS+10% DMSO
Growth properties	Suspension
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.
RPMI 1640	gibco/C11875500BT
Fetal Bovine Serum	ExCell/FSP500
Pen/Strep	Thermo/15140-122
Puromycin	Genomeditech/GM-040401
APC anti-human CD103 (Integrin α E) Antibody	Biolegend/350216
Integrin beta 7 Rat mAb (FITC)	Aladdin/Ab190040

Figures

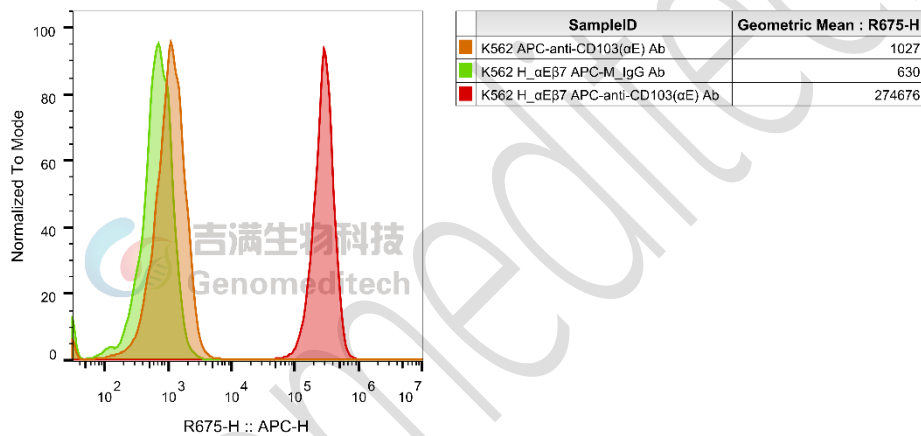


Figure 1 | H_ α E β 7 K562 Cell Line(Cat. GM-C35354) was determined by flow cytometry using APC anti-human CD103 (Integrin α E) Antibody (Biolegend/350216).

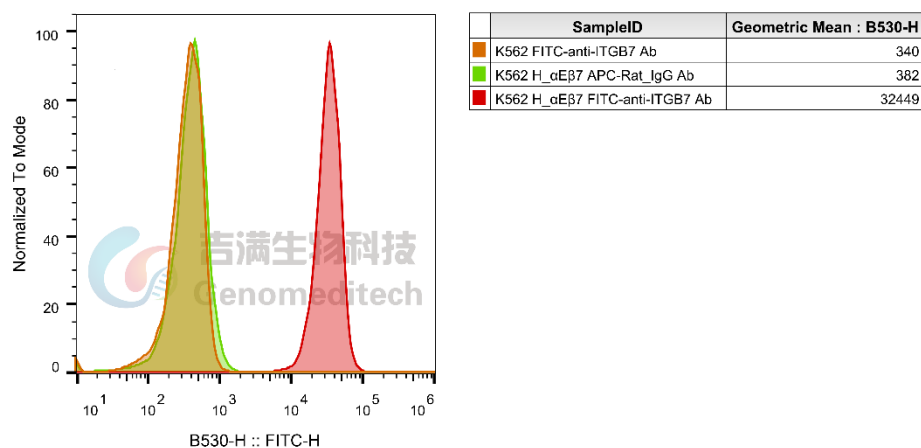


Figure 2 | H_ α E β 7 K562 Cell Line(Cat. GM-C35354) was determined by flow cytometry using Integrin beta 7 Rat mAb (FITC) (Aladdin/Ab190040).

Cell Recovery

Recovery Medium: RPMI 1640+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 $176 \times g$ for 5 minutes. Discard supernatant.
- d) Resuspend cell pellet with the recommended complete medium. And dispense the suspension into 1 - 2 T-25 culture flasks.
- 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 $176 \times g$ for 3 minutes to collect cells.
- b) Resuspend the cells in pre-cooled freezing medium and adjust the cell density to 5×10^6 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: RPMI 1640+10% FBS+1% P.S+0.75 $\mu\text{g}/\text{mL}$ Puromycin

Approximately 48 - 72 hours after the initial thawing, the cells can be passaged for the first time. After this initial passage, the culture medium can be adjusted to growth medium supplemented with antibiotics. If cells are not passaged within 48 hours, it is recommended to add some fresh recovery medium and place the flask horizontally.

- a) When the cell density reaches 1 - 1.2×10^6 cells/mL, subculture the cells. Do not allow the cell density to exceed 1.5×10^6 cells/mL.
- b) It is recommended to use T-25 flasks for subculturing.
- c) These cells are suspension cells, and it is recommended to use the "half-medium change" method to maintain optimal cell conditions during passaging.
- d) During passaging, you can directly add fresh growth medium to the culture flask, gently pipette to resuspend the cells, and then transfer the cell suspension to a new T-25 flask for continued culture.

Subcultivation Ratio: Maintain cultures at a cell concentraion between 3×10^5 and 1×10^6 viable cells/mL.

Medium Renewal: Every 2 to 3 days

Notes

- These cells are sensitive to density, so please ensure that the cell density is maintained within an appropriate range during culture and subculturing.
- During the first passage, pay attention to the nutrient supply; if not subculturing, make sure to add fresh recovery medium every other day as needed.

Sequence

ITGAE P38570

MWLFHTLLCIASLALLAAFNVDVARPWLTPKGGAPFVLSLLHQDPSTNQTWLLVTSRPTKRTPGPLHRCSL
VQDEILCHPVEHVPIPKGRHRGVTVVRSHHGVLICIQVLVRRPHLSSELGTCSLLGPDLRPQAQANFFDLEN
LLDPDARVDTGDCYSNKEGGEDDVNTARQRRALEKEEEEEDKEEEDEEEEEAGTEIAIILDGSGSIDPPDFQ
RAKDFISNMMRNIFYEKCFECNFALVQYGGVIQTEFDLRDSQDVMASLARVQNITQVGSVTKTASAMQHVLV
SIFTSSHGSRKASKVMVVLTDGGIFEDPLNLTTVINSPKMQGVERFAIGVGEFKSARTARELNLIASDPDET
HAFKVTNYMALDGLLSKLRNIISMEGTVDALHYQLAQIGFSAQILDERQVLLGAVGAFDWSGGALLYDT
RSRRGRFLNQTA AAAADAEAAQSYLGYAVAVLHKTCLSYIAGAPRYKHHGAVFELQKEGREASFLPVLE
GEQMGSYFGSELCPVDIDMDGSTDFLLVAAPFYHVHGEEGRVYVYRLSEQDGSFSLARILSGHPGFTNARFG
FAMAAMGDLSQDKLTDVAIGAPLEGFGADDGASFGSVYIYNGHWDLGSLASPSQRIRASTVAPGLQYFGMSM
AGGFDISGDGLADITVGTGQAVVFRSRPVVRLKVSMAFTPSALPIGFNGVNVRLCFEISSVTTASESGLREA
LLNFTLDVDVGKQRRRLQCSDVRSCLGCLREWSSGSQLCEDLLMPTEGELCEEDCFSNASVKVSYQLQTPE
GQTDHPQPILDYRTEPFAIFQLPYEKACKNKLFCVAELQLATTVSQQELVVGLTKELTLNINLTNSGEDSYM
SMALNYPRNLQLKRMQKPPSPNIQCDDPQPVASVLIMNCRIGHPVLKRSSAHVSVVWQLEENAFPNRTADIT
VTVTNSNERRSLANETHTLQFRHGFVAVLSKPSIMYVNTGQGLSHHKEFLFHVHGENLFGAEYQLQICVPTK
LRGLQVAVKKLTRTQASTVCTWSQERACAYSSVQHVEEWSVSCVIASDKENVTVAEISWDHSEELLKD
VTELQILGEISFNKSLYEGLNAENHRTKITVVFLKDEKYHSLPIIKGSVGGLLVLIVILVILFKCGFFKRKYQQL
NLESIRKAQLKSENLEEN

ITGB7 P26010-1

MVALPMVLVLLVLSRGESELDKIPSTGDATEWRNPHLSMLGSCQPAPSCQKCILSHPSCAWCKQLNFTAS
GEAEARRCARREELLARGCPLEEEPRGQQEVLQDQPLSQGARGEGATQLAPQRVRVTLRPGEPQLQVRF
LRAEGYPVDLYLMDLSYSMKDDLVRQLGHALLVRLQEVTHSVRIGFGSFVDKTVLPFVSTVPSKLRHPC
PTRLERCQSPFSFHHVLSLTGDAQAFEREVGRQSVSGNLDSPGGFDAILQAALCQEIQGWRNVSRLLVFTSD
DTFHTAGDGKLGIFMPDGHCHLDSNGLYSRSTEFDYPSVGQVAQALSAANIQPIFAVTSALPVYQELSKL
IPKSAVGELSESSNVVQLIMDAYNSLSSTVTLEHSSLPPGVHISYESQCEGPEKREGKAEDRGQCNHVRINQ
VTFWVSLQATHCLPEPILLRRLALGFSEELIVELHTLDCNCSDTQPQAPHCSDGQGHLCGVCSCAPGRLG
RLCECSVAELSSPDLESGCRAPNGTGPLCSGKGHCQCGRCSGQSSGHLCECDDASCEHHEGILCGGFGRQC
CGVCHCHANRTGRACECSGDMDCISPEGGLCSGHGRCKCNRCQCLDGYYGALCDQCPGCKTPCERHRDC
AECGAFRTGPLATNCSTACAHTNVTALAPILDDGWCKERTLDNQLFFFLVEDDARGTVVLRVRPQEKGAD

HTQAIVLGCVGGIVAVGLGLVLAAYRLSVEIYDRREYSRFEKEQQQLNWKQDSNPLYKSAITTTINPRFQEADS
 PTL

Related Products

IL-23	
H_IL-23 Reporter 293 Cell Line	H_IL-23 Reporter 293 DDX35TM Cell Line
Cynomolgus_IL-23R HEK-293 Cell Line	H_IL-23R HEK-293 Cell Line
H_IL-23R IL12RB1 HEK-293 Cell Line	Membrane bound H_IL-23 CHO-K1 Cell Line
Anti-IL23A hIgG1 Reference Antibody (Gusebio)	Anti-IL23A hIgG1 Reference Antibody (Risbio)
Anti-IL-23R hIgG1 Antibody(5D4)	
Biotinylated Human IL-23A&IL-12B Heterodimer Protein; His-Avi Tag	Cynomolgus IL-23A & Human IL-12B Heterodimer Protein; His Tag
Cynomolgus IL-23A & Mouse IL-12B Heterodimer Protein; His Tag	Cynomolgus IL-23R Protein; hFc Tag
Human IL-23A & Mouse IL-12B Heterodimer Protein; His Tag	Human IL-23A&IL-12B Heterodimer Protein; His Tag
Human IL-23R Protein; hFc Tag	Human IL-23R Protein; His Tag
Mouse IL-23A&IL-12B Heterodimer Protein; His Tag	
TNF:TNFR2:TNFR1	
H_TNFR2 Null Reporter Cell Line	H_TNFR2 Reporter Jurkat Cell Line
H_TNFR2 Reporter V2 Cell Line	Cynomolgus_TNFRSF1B(TNFR2) CHO-K1 Cell Line
H_TNFR1 CHO-K1 Cell Line	H_TNFRSF1B(TNFR2) CHO-K1 Cell Line
H_TNFRSF1B(TNFR2) HEK-293 Cell Line	Membrane Bound H_TNF α CHO-K1 Cell Line
Membrane Bound H_TNF α (cleavage-resistant) CHO-K1 Cell Line	
Anti-H_TNFRSF1B(TNFR2) hIgG1 Antibody(UC2.3.8)	Anti-TNFR1 hIgG1 Antibody(Atrosab)
Anti-TNF- α hIgG1 Reference Antibody (Adabio)	
Cynomolgus TNF alpha Protein; His Tag	Cynomolgus TNFR2 Protein; His Tag
Human TNF alpha Protein; hFc Tag	Human TNF alpha Protein; His Tag
Human TNFR1 Protein; hFc Tag	Human TNFR1 Protein; His Tag
Human TNFR2 Protein; hFc Tag	Human TNFR2 Protein; His Tag
TL1A:DR3(TNFRSF25)	
H_TNFRSF25(DR3) Reporter Jurkat Cell Line	H_TNFSF15(TL1A) Reporter Cell Line
Mouse_TNFRSF25(DR3) Reporter Jurkat Cell Line	Cynomolgus_TNFRSF25(DR3) CHO-K1 Cell Line
Cynomolgus_TNFSF15(TL1A) HEK-293 Cell Line	H_TNFRSF25(DR3) CHO-K1 Cell Line
H_TNFRSF25(DR3) HEK-293 Cell Line	H_TNFSF15(TL1A) CHO-K1 Cell Line
H_TNFSF15(TL1A) HEK-293 Cell Line	Mouse_TNFSF15(TL1A) HEK-293 Cell Line
Anti-H_TNFSF15(TL1A) hIgG1 Antibody(PF-06480605)	Anti-H_TNFSF15(TL1A) hIgG1 Antibody(Tulisokibart、PRA-023)
Anti-H_TNFSF15(TL1A) hIgG4 Antibody	Anti-TL1A hIgG1 Reference Antibody (Duvbio)
Anti-TL1A hIgG1 Reference Antibody (Tulbio)	Anti-TNFRSF25(DR3) hIgG1 Antibody(PTX-35)
Biotinylated Cynomolgus TL1A Protein; His-Avi Tag	Biotinylated Human TL1A Protein; His-Avi Tag
Cynomolgus TL1A Protein; His Tag	Human TL1A Protein; His Tag

ITGA4 ITGB7	
H_MADCAM1 CHO-K1 Cell Line	H_MADCAM1 HEK-293 Cell Line
Anti-Integrin $\alpha\beta7$ hIgG1 Reference Antibody (Vedobio)	

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