

Product Sheet

H_αEβ7 HEK-293 Cell Line

Catalog number: GM-C46296

Version 3.3.1.260723

Description	H_αEβ7 HEK-293 Cell Line is a clonal stable HEK-293 cell line that constitutively expresses the human ITGAE and human 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	P38570 & P26010-1
Gene ID/Uniprot ID	Human_ITGAE & Human_ITGB7
Host Cell	HEK-293
Recovery Medium	DMEM+10% FBS+1% P.S
Growth medium	DMEM+10% FBS+1% P.S+0.75 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.
DMEM	Gibco/C11995500BT
Fetal Bovine Serum	ExCell/FSP500
Pen/Strep	Thermo/15140-122
Puromycin	Genomeditech/ GM-040401
APC anti-human CD103 (Integrin α E) Antibody	biolegend/350215
FITC anti-human/mouse integrin β 7 Antibody	biolegend/121010

Figures

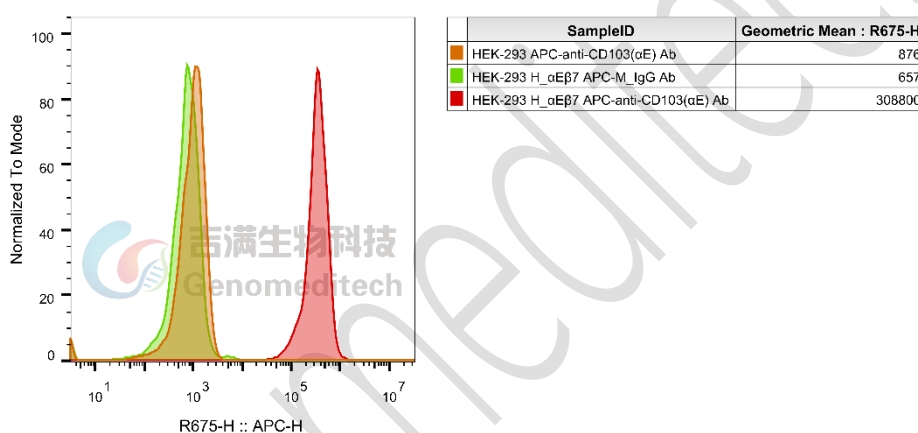


Figure 1 | H_ α E β 7 HEK-293 Cell Line (Cat. GM-C46296) was determined by flow cytometry using APC anti-human CD103 (Integrin α E) Antibody (biolegend/350215).

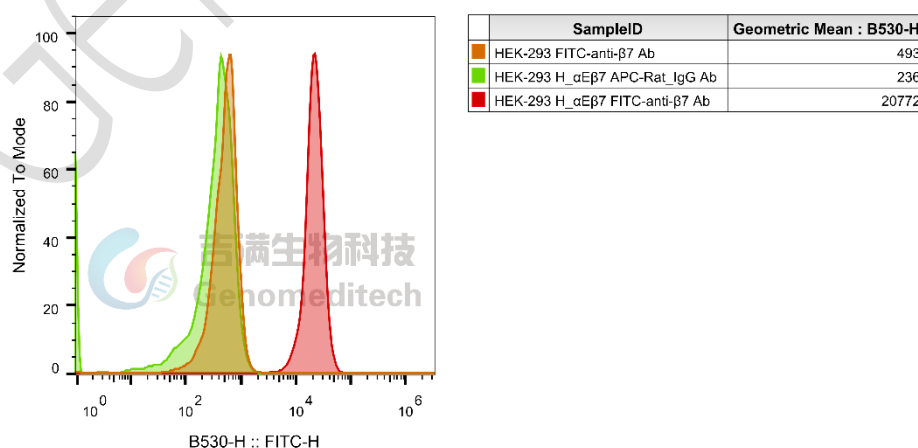


Figure 2 | H_ α E β 7 HEK-293 Cell Line (Cat. GM-C46296) was determined by flow cytometry using FITC anti-human/mouse integrin β 7 Antibody (biolegend/121010).

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+0.75 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.

- Subculturing is necessary when the cell density reaches 80%. It is recommended to perform subculturing at a ratio of 1:3 to 1:4 every 2-3 days. Ensure that the density does not exceed 80%, as overcrowding can lead to reduced viability due to compression.
- 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.

- g) After centrifugation, resuspend the pellet and add appropriate aliquots of the cell suspension to new culture vessels.
h) Incubate cultures at 37°C.

Subcultivation Ratio: A subcultivation ratio of 1:3 - 1:4 is recommended

Medium Renewal: Every 2 to 3 days

Notes

- a) Upon initial thawing, a higher number of dead cells is observed, which is a normal phenomenon. Significant improvement is seen after adaptation. Once the cells reach a stable state, the number of dead cells decreases after subculturing and the cell growth rate becomes stable.
b) Ensure that the cell density does not exceed 80%, as overcrowding may lead to reduced viability due to compression.

Sequence

ITGAE [P38570](#)

MWLFHTLLCIA SLALLAAFNVDVARPW LTPKGGAPFVLSSLLHQDPSTNQ TWLLVTSPRTKRTPGPLHRCSL
VQDEILCHPVEHVPIPKGRHRGVTVVRSHHGVLICIQVLVRRPHSLSSELGTCSLLGPDLRPQAQANFFDLEN
LLDPDARVDTGDCYSNKEGGEDDVNTARQRRALEKEEEEDEEEEEAGTEIAIILDGSGSIDPPDFQ
RAKDFISNM MRNFYEKCFECNFALVQYGGVIQTEFDLRDSQDVMASLARVQNITQVGSVTKTASAMQHVL
SIFTSSHGSRKASKVMVVLTDGGIFEDPLNLTTVINSPKMQGVERFAIGVGEEFKSARTARENLIASDPDET
HAFKVTNYMALDGLLSKLRNYISM EGTVDALHYQLAQIGFSAQILDERQVLLGAVGAFDWSGGALLYDT
RSRRGRFLNQ TAAAAADAEAAQSYLGYAVAVLHKTCSLSYIAGAPRYKHHGAVFELQKEGREASFLPVLE
GEQMGSYFGSELCPVIDMDGSTDFLLVAAPFYHVHGEEGRVYVYRLSEQDGSFSLARILSGHPGFTNARFG
FAMAAMGDLSQDKLTDVAIGAPLEGFGADDGASFGSVYIYNHWDGLSASPSQIRASTVAPGLQYFGMSM
AGGFDISGDGLADITVGT LGQAVVFRSRPVVRLKVSMAFTPSALPIGFNGVNVRLCFEISSVTTASESGLREA
LLNFTLDVDVVGKQRRRLQCS DVRSLGCLREWSSGSQLCEDLLLMPTEGELCEEDCFSNASVKVSYQLQTPE
GQTDHPQPILD RYTEPFAIFQLPYEKACKNKLFCVAELQLATTVSQQLVVG LTKELTLNINLTNSGEDSYMT
SMALNYPRNLQLKRMQKPPSPNIQCDDPQPVASVLIMNCRIGHPV LKRSSAHVS VVWQLEENAFPNRTADIT
VTVTNSNERRSLANETH TLQFRHGFVAVLSKPSIMYVNTGQGLSHHKEFLFHVHGENLFGAEYQLQICVPTK
LRGLQVAVVKLTRTQASTVCTWSQERACAYSSVQHVEEWSVSCVIASDKENVTVA AEISWDHSEELLKD
VTELQILGEISFNKSLYEGLNAENHRTKITVFLKDEKYHSLPIIKGSGVGLLVILVILFKCGFFKRKYQQL
NLESIRKAQLKSEN LLEEN

ITGB7 [P26010-1](#)

MVALPMVLVLLL VLSRGESELD AKIPSTGDATEWRNPHLSMLGSCQPAPSCQKCILSHPSCAWCKQLNFTAS
GEAEARRCARREELLARGCPLEELEEPRGQQEV LQDQPLSQGARGEGATQLAPQRVRVTLRPGE PQQLQVRF
LRAEGYPVDLYLMDLSYS MKDDLVRQLGHALLVRLQEVTHSVRIGFGSFVDKTVLPFVSTVP SKLRHPC
PTRLERCQSPFSFHHVLSLTGDAQAFEREVGRQSVSGNLDSP EGGFDAILQAALCQEIQGWRNVSRLLVFTSD
DTFHTAGDGKLGIFMPSDGHCHLDSNGLYSRSTEFDYP SVGQVAQALSAANIQPIFAV TSAALPVYQELSKL
IPKSAVGELSESSNVVQLIMDAYNSLSSTVTLEHSSLPPGVHISYESQCEGPEKREGKAEDRGQC NHVRINQT
VTFWVSLQATHCLPEPHLLRLRALGFSEELIVELHTLCDCNCSDTQPQAPHCS DGQGHLCGVCSCAPGRLG
RLCECSVAELSSPDLESGCRAPNGTGPLCSGKGHCQCGRCS CSGQSSGHLCECDDAS CERHEGILCGGFGRQC

CGVCHCHANRTGRACECSGDMDCISPEGGLCSGHGRCKCNRCQCLDGYYGALCDQCPGCKTPCERHRDC
AECGAFRTGPLATNCSTACAHTNVTLALAPILDDGWCKERTLDNQLFFFLVEDDARGTVVLRVRPQEKGAD
HTQAIVLGCVGIVAVGLGLVLAYRLSVEIYDRREYSRFEKEQQQLNWKQDSNPLYKSAITTTINPRFQEADS
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_TNFα CHO-K1 Cell Line
Membrane Bound H_TNFα(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; hFc 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
H_α4β7 CHO-K1 Cell Line	H_αEβ7 K562 Cell Line
Anti-Integrin α4β7 hIgG1 Reference Antibody (Vedobio)	

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.