

# Product Sheet

## H\_GARP Latent TGF- $\beta$ 1 HEK-293 Cell Line

Catalog number: GM-C12808

Version 3.3.1.241114

<b>Description</b>	H_GARP Latent TGF- $\beta$ 1 HEK-293 Cell Line is a clonal stable HEK-293 cell line that constitutively expresses the human GARP(LRRC32) and human TGF- $\beta$ 1(TGFB1) gene, constructed using lentiviral technology.
<b>Quantity</b>	5E6 Cells per vial, 1 mL
<b>Product Format</b>	1 vial of frozen cells
<b>Shipping</b>	Shipped on dry ice
<b>Storage Conditions</b>	Liquid nitrogen immediately upon receipt
<b>Target</b>	Human_GARP(LRRC32) & Human_TGF- $\beta$ 1(TGFB1)
<b>Gene ID/Uniprot ID</b>	NP_005503.1 & NP_000651.3
<b>Host Cell</b>	HEK-293
<b>Recovery Medium</b>	DMEM+10% FBS+1% P.S
<b>Growth medium</b>	DMEM+10% FBS+1% P.S+10 $\mu$ g/mL Blasticidin+0.75 $\mu$ g/mL Puromycin
<b>Note</b>	Cells should be cultured using gibco/C11995500BT DMEM medium or Growth medium from Genomeditech. The serum should be Cegrogen biotech/A0500-3010 or sourced from Gibco.
<b>Freezing Medium</b>	90% FBS+10% DMSO
<b>Growth properties</b>	Adherent
<b>Growth Conditions</b>	37°C, 5% CO <sub>2</sub>
<b>Mycoplasma Testing</b>	The cell line has been screened to confirm the absence of Mycoplasma species.
<b>Safety considerations</b>	Biosafety Level 2
<b>Note</b>	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	Cegrogen biotech/A0500-3010
Pen/Strep	Thermo/15140-122
Blasticidin	Genomeditech/GM-040404
Puromycin	Genomeditech/GM-040401
Anti-GARP-TGF- $\beta$ 1 hIgG4 Antibody(ARGX-115)	Genomeditech/GM-30474AB

## Figures

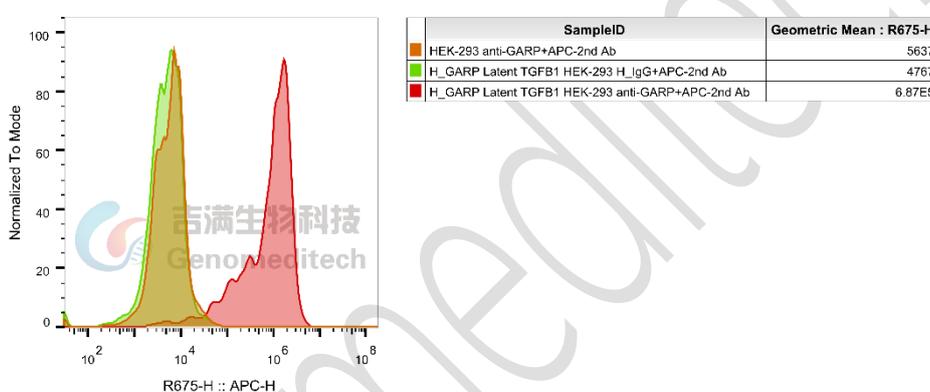


Figure 1 | H\_GARP Latent TGF- $\beta$ 1 HEK-293 Cell Line (Cat. GM-C12808) was determined by flow cytometry using Anti-GARP-TGF- $\beta$ 1 hIgG4 Antibody(ARGX-115) (Cat. [GM-30474AB](#)).

## 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.

- 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<sub>2</sub> 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+10 µg/mL Blasticidin+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.

- 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 1:3 - 1:4 is recommended**

**Medium Renewal: Every 2 to 3 days**

## Notes

- a) Upon initial revival, a higher number of dead cells and poor adherence are observed, which is normal. Adherence typically recovers within 2 - 3 days. After 2 - 3 passages, the proportion of adherent cells increases, and the cells begin to spread normally.
- b) After each passage, there may be 5-10% dead cells; however, as the number of passages increases, the recovery rate accelerates, the proportion of dead cells decreases, and the cell growth rate stabilizes.
- c) It is recommended to retain cell images after revival and during each observation to assist in assessing cell status. In case of abnormalities, promptly communicate with Geomeditech sales.

## Sequence

TGF- $\beta$ 1(TGFB1) [NP\\_000651.3](#)

MPPSGLRLLPLLLPLLWLLVLTTPGRPAAGLSTCKTIDMELVKRKRIEAIRGQILSKLRRLASPPSQGEVPPGPLPE  
 AVLALYNSTRDRVAGESAEPEPEPEADYYAKEVTRVLMVETHNEIYDKFKQSTHSIYMFNTSELREAVPEP  
 VLLSRAELRLLRLKLVKVEQHVELYQKYSNNSWRYLSNRLAPSDSPEWLSFDVTGVVVRQWLSRGGEIEGFRL  
 SAHCSCDSRDNTLQVDINGFTTGRRGDLATIHGMNRPFLLLMATPLERAQHLQSSRHRRALDTNYCFSSTEK  
 NCCVRQLYIDFRKDLGWKWIHEPKGYHANFCLGPCPYIWSLDTQYSKVLALYNQHNPASAAAPCCVPALE  
 PLPIVYYVGRKPKVEQLSNMIVRSCKCS

GARP(LRRC32) [NP\\_005503.1](#)

MRPQILLLLALLTLGLAAQHDKVPCMKMVDKVKVSCQVLGLLQVPSVLPPDTETLDLSGNQLRSILASPLGFYT  
 ALRHLDLSTNEISFLQPGAFQALTHLEHLSLAHNRLAMATALSAGGLGPLRVTSLDLSGNSLYSGLLERLLG  
 EAPSLHTLSLAENSLTRLTRHTFRDMPALEQLDLHSNVLMIEDGAFEGPLRLTHLNLSRNSLTCISDFSLQQL  
 RVLDLSCNSIEAFQTASQPQAEFQLTWLDLRENKLLHFPDLAALPRLIYLNLSNNLIRLPTGPPQDSKGIHAPSE  
 GWSALPLSAPSGNASGRPLSLLNLDLSYNEIELIPDSFLEHLTSLCFLNLSRNCLRTFEARRLGSLPCLMLLDL  
 SHNALETLELGARALGSLRTLQGNALRDLPYTFANLASLQRLNLQGNRVSPCGGPDEPGPSGCVAFSGIT  
 SLRSLSLVDNEIELLRAGAFHTPLTELDSLNPGLVATGALGGLEASLEVLALQGNGLMVLQVDLPCFICL  
 KRLNLAENRSLHPAWTQAVSLEVLDLRNNFSLLPGSAMGGLETSLRRLYLQGNPLSCCGNGWLAAQLHQ  
 GRVDV DATQDLICRFSSQEEVSLSHVRPEDCEKGGKKNINLIILTFILVSAILLTTLAACCCVRRQKFNQQYKA

## Related Products

TGF- $\beta$ :GARP:av $\beta$ 6	
<a href="#">H_GARP Latent TGFB1 Reporter HEK-293 Cell Line</a>	<a href="#">TGF-<math>\beta</math> Reporter 293 DDX35TM Cell Line</a>
<a href="#">TGF-<math>\beta</math> Reporter HEK-293 Cell Line</a>	<a href="#">Cynomolgus_<math>\alpha</math>v<math>\beta</math>6 HEK-293 Cell Line</a>
<a href="#">H_GARP CHO-K1 Cell Line</a>	<a href="#">H_GARP HEK-293 Cell Line</a>
<a href="#">H_GARP Latent TGF-<math>\beta</math>1 CHO-K1 Cell Line</a>	<a href="#">H_ITGB6 CHO-K1 Cell Line</a>
<a href="#">H_ITGB6 HEK-293 Cell Line</a>	<a href="#">H_<math>\alpha</math>v<math>\beta</math>6 CT26 Cell Line</a>
<a href="#">H_<math>\alpha</math>v<math>\beta</math>6 HEK-293 Cell Line</a>	<a href="#">H_<math>\alpha</math>v<math>\beta</math>6 LLC1 Cell Line</a>
<a href="#">H_<math>\alpha</math>v<math>\beta</math>6 MC38 Cell Line</a>	
<a href="#">Anti-GARP-TGF-<math>\beta</math>1 hIgG4 Antibody(ARGX-115)</a>	<a href="#">Anti-H_ITGB6 hIgG1 Reference Antibody (h2A2)</a>
<a href="#">Anti-ITGB6 hIgG1 Antibody(SGN-B6A)</a>	<a href="#">Anti-TGFB1 hIgG4 Antibody(SRK-181)</a>
<a href="#">Anti-<math>\alpha</math>v hIgG2 Antibody(Abituzumab)</a>	<a href="#">Anti-<math>\alpha</math>v<math>\beta</math>6 hIgG1 Antibody(m15H3)</a>
<a href="#">Anti-ITGB6-MMAE ADC(Dar4)[SGN-B6A]</a>	
ADC Related Product	
<a href="#">Anti-DXD Mouse IgG1 Antibody (23E21C5)</a>	<a href="#">Anti-DXD Mouse IgG1 Antibody (4A5A12)</a>
<a href="#">Anti-Dxd Mouse IgG2a Antibody (17D6A4)</a>	<a href="#">Anti-Eribulin Mouse IgG2a Antibody (10F8G4)</a>
<a href="#">Anti-MMAE Mouse IgG1 Antibody (11C10E3)</a>	<a href="#">Anti-MMAE Mouse IgG2a Antibody (17A1K11)</a>
<a href="#">Anti-MMAE Mouse IgG2a Antibody (8F6A3)</a>	<a href="#">Mouse anti Human IgG-MMAE(Dar4)</a>
<a href="#">Human IgG1 Isotype-DXD (Dar8)</a>	<a href="#">Human IgG1 Isotype-Eribulin (Dar4)</a>
<a href="#">Human IgG1 Isotype-MMAE (Dar4)</a>	

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