

Product Sheet

Rat_IL1RAP HEK-293(IL1RAP KO) Cell Line

Catalog number: GM-C47443

Version 3.3.1.260813

Description	Rat_IL1RAP HEK-293(IL1RAP KO) Cell Line is a clonal stable HEK-293(Human IL1RAP KO) cell line that constitutively expresses the Rat IL1RAP 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	Rat_IL1RAP
Gene ID/Uniprot ID	Q63621
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
Anti-IL1RAP hIgG1 Antibody (24G3_17C5)	Genomeditech/GM-88261AB
Anti-IL1RAP hIgG1 Antibody (48D2_VH5.GL_VL4)	Genomeditech/GM-88388AB

Figures

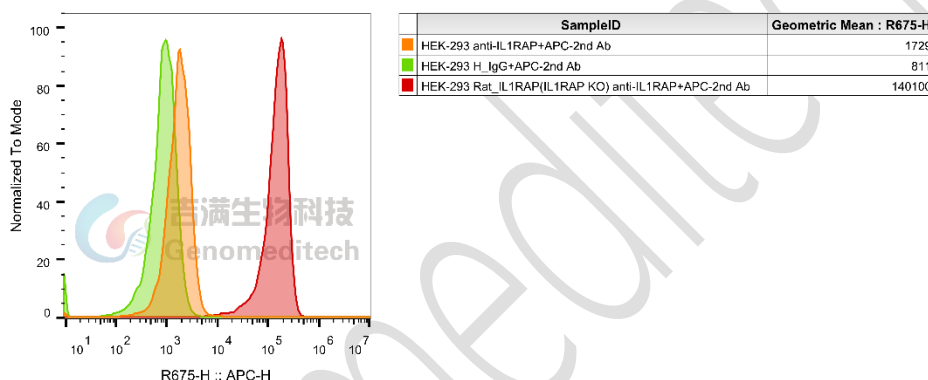


Figure 1 | Rat_IL1RAP HEK-293(IL1RAP KO) Cell Line (Cat. GM-C47443) was determined by flow cytometry using Anti-IL1RAP hIgG1 Antibody (24G3_17C5) (Cat. GM-88261AB). (The antibody recognizes both human and Rat)

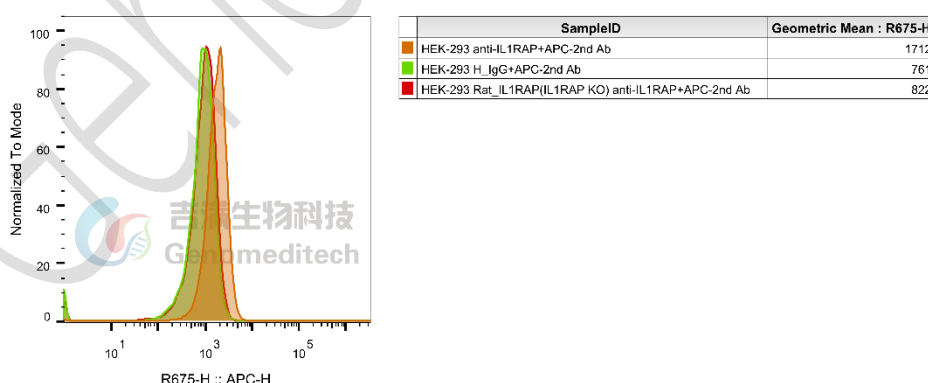


Figure 2 | Rat_IL1RAP HEK-293(IL1RAP KO) Cell Line (Cat. GM-C47443) was determined by flow cytometry using Anti-IL1RAP hIgG1 Antibody (48D2_VH5.GL_VL4) (Cat. GM-88388AB). (The antibody recognizes human, but not mouse).

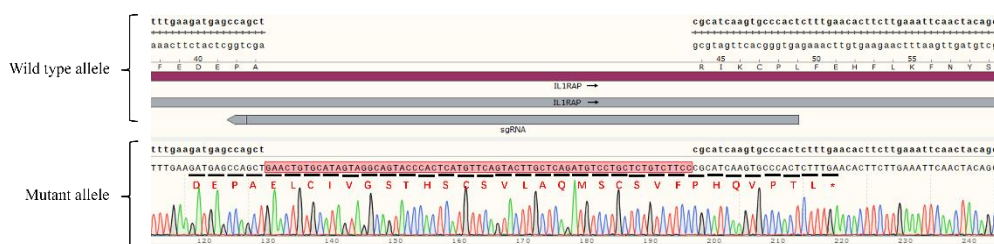


Figure 3 | The Sanger sequencing of the parent cells showed that the endogenous expression of IL1RAP has been knocked out.

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.
- After centrifugation, resuspend the pellet and add appropriate aliquots of the cell suspension to new culture vessels.
- 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

- 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.
- Ensure that the cell density does not exceed 80%, as overcrowding may lead to reduced viability due to compression.

Sequence

IL1RAP Q63621

MGLPWCLMSLFCCGILQSHASERCDDWGLDTMRQIQVFEDEPARIKCPLFEHFLKYNYSTAHSSGLTLIWYW
TRQDRDLEEPINFRLPENRISKEKDVLWFRPTLLNDTGNYTCMLRNTTYCSKVAFFLEVQKDCSFNSPMRLP
VHRLYIEQGIHNITCPNVDGYFPSSVKPSVTWYKGCTEIVNFHNVPKGMNLSFFIPLVSNNGNYTCVVTYLE
NGRLFHLTRTMTVKVVGSPKDAVPPHIYSPNDRVVEKEPGEELVIPCKVYFSFIMDSHNEIWWTIDGKKPD
DVPVDITIESSVSYSSTEDETRQILSIKKVTPEDLKRNYVCHARNAEAGEAQAQKVKQKVIPPRYTVELACGF
GATVFLVVVLIVVYHVYWLEMLVLFYRAHFGTDEILDGKEYDIYVSYARNAEEEEFVLLTLRGVLENEFGYK
LCIFDRDSFPGGIVTDETLSEFIQKSRRLLVVLSPNYVLQGTQALLELKAGLENMASRGNINVILVQYKAVKDL
KVKELKRAKSVLTVIKWKGEKSKYPQGRFWKQLQVAMPVKKSPRWSSDKQGLSYSSLKNV

Related Products

IL-1	
H_IL1RAP IL1R1 KO Reporter HEK-293 Cell Line	H_IL1RAP KO HEK-293 Cell Line
H_IL-1 Reporter 293 Cell Line	H_IL-1 Reporter 293 Cell Line (old version)
Cynomolgus_IL-1R HEK-293 Cell Line	Cynomolgus_IL1RAP CHO-K1 Cell Line

Cynomolgus_IL1RAP HEK-293 Cell Line	H_IL-1R CHO-K1 Cell Line
H_IL-1R HEK-293 Cell Line	H_IL1RAP CHO-K1 Cell Line
H_IL1RAP HEK-293 Cell Line	Membrane bound H_IL-1 α CHO-K1 Cell Line
Membrane bound H_IL-1 α HEK-293 Cell Line	Membrane bound H_IL-1 β CHO-K1 Cell Line
Membrane bound H_IL-1 β HEK-293 Cell Line	Mouse_IL1RAP HEK-293 Cell Line
Mouse_IL1RAP HEK-293(IL1RAP KO) Cell Line	Rat_IL1RAP HEK-293 Cell Line
Anti-IL1B $\times$ IL1A hIgG1 Bispecific antibody(lutikizumab)	Anti-IL1R1 hIgG1 Antibody(AMG 108)
Anti-IL1RAP hIgG1 Antibody (Nadunolimab)	Anti-IL-1 β hIgG1 Antibody(Canakinumab)
Biotinylated Human IL-1 alpha Protein; His-Avi Tag	Biotinylated Human IL-1 beta Protein; His-Avi Tag
Cynomolgus IL-1 alpha Protein; His Tag	Cynomolgus IL-1 beta Protein; His Tag
Human IL-1 alpha Protein; hFc Tag	Human IL-1 alpha Protein; His Tag
Human IL-1 beta Protein; hFc Tag	Human IL-1 beta Protein; His Tag
Human IL-1RAP Protein; hFc Tag	Human IL-1RAP Protein; His Tag
Human IL-1RI Protein; hFc Tag	Human IL-1RI Protein; His Tag
Human IL-1RI&IL-1RAP Heterodimer Protein; hFc Tag (Goflikcept)	

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