

HEK293/Human IL-4 R alpha Stable Cell Line Data Sheet

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HEK293/Human IL-4 R alpha Stable Cell Line

Catalog No.	Size
CHEK-ATP303	2 × (1 vial contains ~5×10 ⁶ cells)

• Description

The HEK293/Human IL-4 R alpha Stable Cell Line was engineered to express the receptor full length human IL-4 R alpha (Uniprot: P24394-1). Surface expression of human IL-4 R alpha was confirmed by flow cytometry.

• Application

- Useful for cell-based IL-4 R alpha binding assay

• Cell Line Profile

Cell line	HEK293/Human IL-4 R alpha Stable Cell Line
Host Cell	HEK293
Property	Adherent
Complete Growth Medium	DMEM + 10% FBS
Selection Marker	Hygromycin B (20 µg/mL)
Incubation	37°C with 5% CO ₂
Doubling Time	22-24 hours
Transduction Technique	Lentivirus

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• *Materials Required for Cell Culture*

- DMEM Medium (BasalMedia, Cat. No. L120KJ)

Note: If you are unable to obtain the specified DMEM medium (BasalMedia, Cat. No. L120KJ), you may use an alternative DMEM medium (Gibco, Cat. No. 11965-092) or another suitable medium for culturing.

- Fetal bovine serum (CellMax, Cat. No. SA211.02)
- Hygromycin B (Invitrogen, Cat. No. 10687010)

Note: For selection antibiotics, we highly recommend using the specified brand. The activity of antibiotics may vary between manufacturers, so if you choose to use a different brand, it is essential to validate whether the concentration recommended in the culture medium is suitable. Regardless of the brand used, we recommend maintaining a backup culture without selection antibiotics to avoid potential cell loss due to inappropriate antibiotic concentration.

- 0.25% Trypsin-EDTA (1X), Phenol Red (Gibco, Cat. No. 25200-056)
- Penicillin-Streptomycin (Gibco, Cat. No. 15140-122)
- Phosphate Buffered Saline (1X) (HyClone, Cat. No. SH30256.01)
- Complete Growth Medium: DMEM + 10% FBS, 1%P/S
- Culture Medium: DMEM + 10% FBS, Hygromycin B (20 µg/mL), 1%P/S
- Freeze Medium: 90% FBS, 10% (V/V) DMSO
- T-75 Culture flask (Corning, Cat. No. 430641)
- Cryogenic storage vials (SARSTEDT, Cat. No. 72.379.007)
- Thermostat water bath
- Centrifuge (Cence, Model: L550)
- Cell counter (MONWEI, Model: SmartCell200A Plus)
- CO₂ Incubator (Thermo, Model: 3111)
- Biological Safety Cabinet (Thermo, Model: 1389)

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• *Recovery*

1. Thaw the vial by gently agitating it in a 37°C water bath. To minimize the risk of contamination, ensure the cap remains out of the water. Thawing should be completed quickly, typically within 3-5 minutes.
2. After thawing, promptly remove the vial from the water bath and decontaminate it by spraying with 70% ethanol. From this point onward, all operations must be performed under strict aseptic conditions.
3. Transfer the contents of the vial to a centrifuge tube containing 4.0 mL of complete growth medium. Centrifuge at approximately 1000 rpm for 5 minutes.
4. Resuspend the cell pellet with 5 mL **complete growth medium** and transfer the cell suspension into a T-75 flask containing 10-15 mL of pre-warmed **complete growth medium**.
5. Incubate at 37°C with 5% CO₂ incubator until the cells are ready to be split.

• *Subculture*

1. Cell viability may be low after thawing, and full recovery may take up to a week. Monitor the cells daily until the culture reaches 80-90% confluency. At this point, remove and discard the spent medium. Avoid allowing the cells to become over-confluent to ensure optimal cell health.
2. Wash the cells once with sterile PBS. Avoid adding PBS directly onto the cell surface.
3. Add 2 mL of 0.25% Trypsin-EDTA to the T-75 flask. Place the flask at 37°C for 2-3 minutes, until 90% of the cells have detached. Monitor under a microscope to avoid over-trypsinization.
4. Add 6.0 to 8.0 mL of **culture medium** using a pipette and gently rinse the cells from the surface of the T-75 flask. Gently pipette up and down several times to achieve a single cell suspension without cell clumps.
5. Transfer appropriate aliquots of the cell suspension to a new T-75 flask. A subcultivation ratio of 1:4 to 1:8 is recommended. Adjust the ratio based on your specific culture system.
6. Incubate at 37°C with 5% CO₂ incubator.
7. When the cell culture reaches 80-90% confluency, proceed to the next subculture. Avoid over-confluency, as this may negatively impact cell performance in subsequent passages.

Note:

(1) After recovery, maintain the cells for 1-2 passages in the complete growth medium not containing the selection marker, if the cells are in good condition, transition to the culture medium containing the selection marker during subculturing.

(2) To ensure optimal cell health, it is essential to replace with a new T75 flask at each passage.

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• *Cryopreservation*

1. When the cell culture reaches 80-90% confluency, remove and discard the spent medium.
2. Wash the cells once with sterile PBS. Avoid adding PBS directly onto the cell surface.
3. Add 2 mL of 0.25% Trypsin-EDTA to the T-75 flask. Place the flask at 37°C for 2-3 minutes, until 90% of the cells have detached. Monitor under a microscope to avoid over-trypsinization.
4. Add 6.0 to 8.0 mL of complete growth medium using a pipette and gently rinse the cells from the surface of the T-75 flask. Gently pipette up and down several times to achieve a single cell suspension without cell clumps. Count the viable cells.
5. Transfer the cell suspension to a centrifuge tube. Centrifuge at 1000 rpm for 5 min at room temperature to pellet the cells.
6. After centrifugation, discard the supernatant. Resuspend the cells in ice cold freezing medium to a concentration of 5×10^6 to 1×10^7 cells/mL.
7. Aliquot the cell suspension into cryogenic storage vials. Place the vials in a programmable cooler or an insulated box placed in a -80°C freezer overnight, then transfer to liquid nitrogen storage for long-term storage.

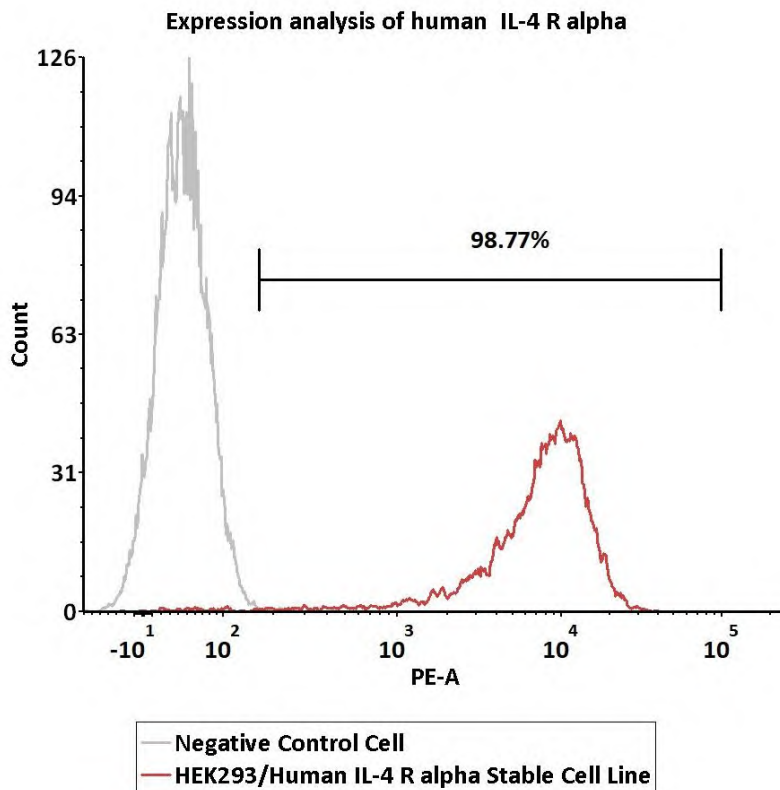
Note: It is recommended to establish a cell bank at the earliest possible passage for long-term use.

• *Storage*

Cells must be received in a frozen state on dry ice and should be transferred to liquid nitrogen or a -80°C freezer immediately upon receipt. If stored in a -80°C freezer, it is recommended to limit the storage period to no more than two weeks. For long-term preservation, transfer the cells to liquid nitrogen is highly recommended.

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• *Receptor Assay*



Catalog No.	Stable Cell Line	MFI for IL-4 R alpha (PE)
NA	Negative Control Cell	41.23
CHEK-ATP303	HEK293/ Human IL-4 R alpha Stable Cell Line	7898.53

Fig1. Expression analysis of human IL-4 R alpha on HEK293/Human IL-4 R alpha Stable Cell Line by FACS. Cell surface staining was performed on HEK293/Human IL-4 R alpha Stable Cell Line or negative control cell using PE-labeled anti-human IL-4 R antibody.

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• *Related Products*

<u>Products</u>	<u>Cat.No.</u>
HEK293/hClaudin-18.2 Cell Line	CHEK-ATP033
HEK293/hGPRC5D Cell Line	CHEK-STP042
HEK293/Human TROP-2 Stable Cell Line	CHEK-ATP036
HEK293/Human Nectin-4 Stable Cell Line	CHEK-ATP035
HEK293/Human Anti-CD19 Stable Cell Line	CHEK-ATS056
CHO/Human GPRC5D Stable Cell Line	CCHO-STP078
HEK293/Human CEACAM5 Stable Cell Line	CHEK-ATP083
HEK293/Human ROR1 Stable Cell Line	CHEK-ATP084
HEK293/Human Transferrin R Stable Cell Line	CHEK-ATP089
HEK293/Human DLL3 Stable Cell Line	CHEK-ATP090
HEK293/Human FOLR1 Stable Cell Line	CHEK-ATP091
HEK293/Human Glypican-3 (GPC3) Stable Cell Line	CHEK-ATP092
CHO/Human DLL3 Stable Cell Line	SCCHO-ATP111
CHO/Human Glypican-3 (GPC3) Stable Cell Line	SCCHO-ATP112
HEK293/Human Transferrin Stable Cell Line	CHEK-ATP115
HEK293/Human NAPI-IIb Stable Cell Line	CHEK-ATP116
HEK293/Human Mesothelin Stable Cell Line	CHEK-ATP119
CHO/Human Mesothelin Stable Cell Line	SCCHO-ATP120
CHO/Human STEAP1 Stable Cell Line	SCCHO-ATP121
HEK293/Human ENPP3 Stable Cell Line	CHEK-ATP122
HEK293/Human LRRC15 Stable Cell Line	CHEK-ATP123
HEK293/Human Claudin-1 Stable Cell Line	CHEK-ATP124
HEK293/Human Integrin alpha V beta 6 Stable Cell Line	CHEK-ATP125
HEK293/Human B7-H4 Stable Cell Line	CHEK-ATP126
HEK293/Human Cadherin-6 Stable Cell Line	CHEK-ATP127
HEK293/Human LY6G6D Stable Cell Line	CHEK-ATP137
HEK293/Human Claudin-6 Stable Cell Line	CHEK-ATP138
HEK293/Human Claudin-9 Stable Cell Line	CHEK-ATP139

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• *Related Products*

Products

Cat.No.

CHO/Human c-MET Stable Cell Line	SCCHO-ATP141
HEK293/Human c-MET Stable Cell Line	CHEK-ATP146
HEK293/Human EGF R Stable Cell Line	CHEK-ATP148
HEK293/Human ErbB3 Stable Cell Line	CHEK-ATP149
HEK293/Human ErbB2 Stable Cell Line	CHEK-ATP150
HEK293/Human uPAR Stable Cell Line	CHEK-ATP151
CHO/Human uPAR Stable Cell Line	SCCHO-ATP152
HEK293/Human CD19 Stable Cell Line	CHEK-ATP003
HEK293/Human STEAP1 Stable Cell Line	CHEK-ATP154
CHO/Human CD79A&CD79B Stable Cell Line	SCCHO-ATP170
CHO/Human CD79B Stable Cell Line	SCCHO-ATP171
HEK293/Human Cadherin-17 Stable Cell Line	CHEK-ATP173
HEK293/Human EpCAM Stable Cell Line	CHEK-ATP175
HEK293/Human TPBG Stable Cell Line	CHEK-ATP176
CHO/Cynomolgus Glypican-3 (GPC3) Stable Cell Line	SCCHO-ATP179
HEK293/Human GUCY2C Stable Cell Line	CHEK-ATP182
HEK293/Human SEZ6 Stable Cell Line	CHEK-ATP183
HEK293/Human FAP Stable Cell Line	CHEK-ATP184
HEK293/Human PSMA Stable Cell Line	CHEK-ATP185
HEK293/Human PTK7 Stable Cell Line	CHEK-ATP186
HEK293/Human MCAM Stable Cell Line	CHEK-ATP195
HEK293/Human GPC3 ΔHS Stable Cell Line	CHEK-ATP212
HEK293/Human c-MET&ErbB3 Stable Cell Line	CHEK-ATP217
HEK293/Human BCMA Stable Cell Line	CHEK-ATP218
CHO/Human CD32a (131R) Stable Cell Line	SCCHO-ATP223
CHO/Human CD16a (158F) Stable Cell Line	SCCHO-ATP224
CHO/Human CD89 Stable Cell Line	SCCHO-ATP225
Raji/Human TL1A Stable Cell Line	CRAJ-STP232

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• *Related Products*

<u>Products</u>	<u>Cat.No.</u>
CHO/Human CDCP1 (R368A, K369A) Stable Cell Line	CCHO-ATP234
CHO/Human CDCP1 (NTF&CTF) Stable Cell Line	CCHO-ATP235
HEK293/Human Tissue Factor Stable Cell Line	CHEK-ATP240
CHO/Human MAdCAM-1 Stable Cell Line	CCHO-ATP241
HEK293/Human Integrin alpha 4 beta 7 (ITGA4&ITGB7) Stable Cell Line	CHEK-ATP243
Jurkat/Human Transmembrane TNF-alpha (mTNF) Stable Cell Line	CJUR-STF248
CHO/Human CXCR3 Stable Cell Line	CCHO-ATP252
HEK293/Human CXCR3 Stable Cell Line	CHEK-ATP253
CHO/Human Integrin alpha V beta 6 Stable Cell Line	CCHO-ATP254
HEK293/Human ASGR2 Stable Cell Line	CHEK-ATP256
Jurkat/Luc Stable Cell Line	CJUR-STP258
HEK293/Human FGF R2 (IIIb) Stable Cell Line	CHEK-ATP259
HEK293/Human STEAP2 Stable Cell Line	CHEK-ATP263
CHO/Human PD-1 Stable Cell Line	CCHO-ATP266
HEK293/Human CDCP1 (NTF&CTF) Stable Cell Line	CHEK-ATP280