

HEK293/Human Transferrin Stable Cell Line Data Sheet

HEK293/Human Transferrin Stable Cell Line

Catalog No.	Size
CHEK-ATP115	2 × (1 vial contains ~5×10 ⁶ cells)

• Description

The HEK293/Human Transferrin Stable Cell Line was engineered to express the receptor full length human Transferrin (Gene ID: 7018), used to mimic cancer target cells. Surface expression of Human Transferrin was confirmed by flow cytometry.

• Application

- Useful for cell-based Transferrin binding assay

• Cell Line Profile

Cell line	HEK293/Human Transferrin Stable Cell Line
Host Cell	HEK293
Property	Adherent
Complete Growth Medium	DMEM + 10% FBS
Selection Marker	NA
Incubation	37°C with 5% CO ₂
Doubling Time	22-24 hours
Transduction Technique	Lentivirus

HEK293/Human Transferrin Stable Cell Line Data Sheet

• *Materials Required for Cell Culture*

- DMEM medium (Gibco, Cat.No.11965-092)
- Fetal bovine serum (CellMax, Cat.No.SA211.02)
- 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)
- Culture Medium: DMEM + 10% FBS, 1% P/S
- Freeze Medium: 90% FBS, 10% (V/V) DMSO
- T-75 Culture flask (Corning, 430641)
- Cryogenic storage vials (SARSTEDT, 72.379.007)
- Thermostat water bath
- Centrifuge
- Luna cell counter (Logos Biosystems, LUNA- II)
- CO₂ Incubator (Thermo, 3111)
- Biological Safety Cabinet (Thermo, 1389)

HEK293/Human Transferrin Stable Cell Line Data Sheet

• *Recovery*

1. Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the cap out of the water. Thawing should be rapid (approximately 2 minutes).
2. Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by spraying with 70% ethanol. All the operations from this point on should be carried out under strict aseptic conditions.
3. Transfer the vial contents to a centrifuge tube containing 4.0 mL culture medium and spin at approximately 1000 rpm for 5 minutes.
4. Resuspend cell pellet with 5 mL culture medium and transfer the cell suspension into T-75 flask containing 10-15 mL of pre-warmed culture medium.
5. Incubate at 37°C with 5% CO₂ incubator until the cells are ready to be split.

• *Subculture*

1. Remove and discard culture medium.
2. Wash the cells once with sterile PBS.
3. Add 2 mL of 0.25% trypsin to cell culture flask. Place the flask at 37°C for 2-3 minutes, until 90% of the cells have detached.
4. Add 6.0 to 8.0 mL of culture medium and aspirate cells by gently pipetting.
5. Add appropriate aliquots of the cell suspension to new culture vessel.
6. Incubate at 37°C with 5% CO₂ incubator.

Subcultivation Ratio: A subcultivation ratio of 1:6 to 1:10 is recommended.

Medium Renewal: Every 2 to 3 days.

HEK293/Human Transferrin Stable Cell Line Data Sheet

• *Cryopreservation*

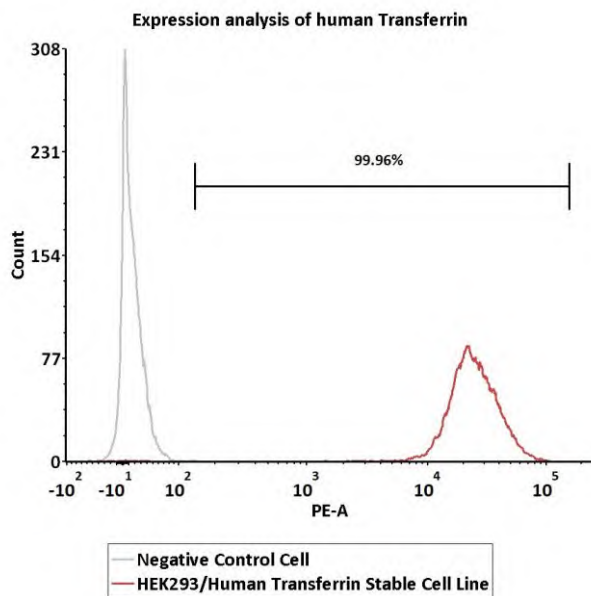
1. Remove and discard spent medium.
2. Detach cells from the cell culture flasks with 0.25% trypsin.
3. Centrifuge at 1000 rpm for 5 min at RT to pellet cells.
4. Resuspend the cell pellets with culture medium and count viable cells.
5. Centrifuge at 1000 rpm for 5 min at RT and resuspend cells in freezing medium to a concentration of 5×10^6 to 1×10^7 cells/mL.
6. Aliquot into cryogenic storage vials. Place vials in a programmable cooler or an insulated box placed in a -80°C freezer overnight, then transferring to liquid nitrogen storage.

• *Storage*

- **Product format:** Frozen
- **Storage conditions:** Liquid nitrogen immediately upon receipt

HEK293/Human Transferrin Stable Cell Line Data Sheet

• *Receptor Assay*

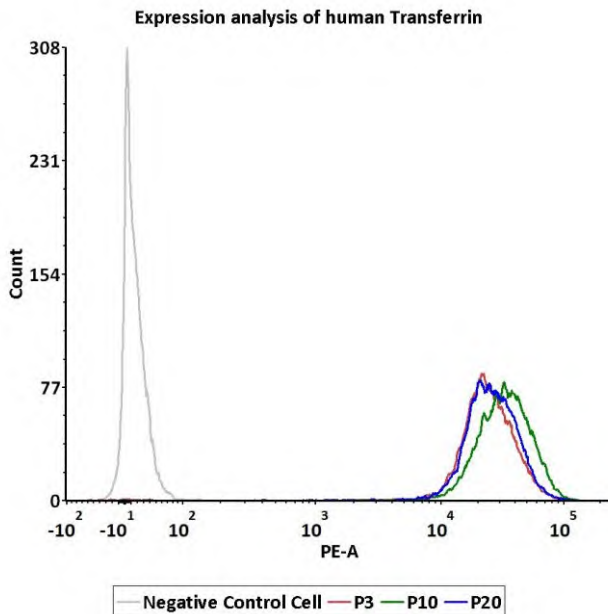


Catalog No.	Stable Cell Line	MFI for Transferrin (PE)
NA	Negative Control Cell	8.3
CHEK-ATF115	HEK293/Human Transferrin Stable Cell Line	22948.13

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

HEK293/Human Transferrin Stable Cell Line Data Sheet

• *Passage Stability*



Passage	MFI for Transferrin (PE)
P3	22948.13
P10	31759.12
P20	24515.74

Fig2. Passage stability analysis of receptors expression by FACS. Flow cytometry surface staining of human Transferrin on HEK293/Human Transferrin Stable Cell Line demonstrates consistent mean fluorescent intensity across passage 3-20.

HEK293/Human Transferrin Stable Cell Line Data Sheet

• *License Disclosure*

This reporter cell is provided for research use only. This license does not permit you to share, distribute, sell, sublicense, or otherwise make this reporter cell available for use to other laboratories, departments, research institutions, hospitals, universities, or biotech companies. The license does not permit modification of this reporter cell in any way. Inappropriate use or distribution of this reporter cell will result in revocation of the license. Modifications of this cell line, transfer to another facility, or commercial use of the cells may require a separate license and additional fees. AcroBiosystems does not warrant the suitability of this reporter cell for any particular use, and does not accept any liability in connection with the handling or use of this reporter cell.

• *Related Products*

Products

Cat.No.

HEK293/Human ROR1 Stable Cell Line	CHEK-ATP084
HEK293/Human Mesothelin Stable Cell Line	CHEK-ATP119
HEK293/Human Glypican-3 (GPC3) Stable Cell Line	CHEK-ATP092
HEK293/Human DLL3 Stable Cell Line	CHEK-ATP090
HEK293/Human NAPI-IIb Stable Cell Line	CHEK-ATP116
HEK293/Human FOLR1 Stable Cell Line	CHEK-ATP091