

# CHO/Human STEAP1 Stable Cell Line Development Service Data Sheet

## CHO/Human STEAP1 Stable Cell Line

Catalog No.	Size
SCCHO-ATP121	2 × (1 vial contains ~5×10 <sup>6</sup> cells)

### • *Description*

The CHO/Human STEAP1 Stable Cell Line was engineered to express the receptor full length human STEAP1 (Gene ID: 26872), used to mimic cancer target cells. Surface expression of human STEAP1 was confirmed by flow cytometry.

### • *Application*

- Useful for cell-based STEAP1 binding assay

### • *Cell Line Profile*

Cell line	CHO/Human STEAP1 Stable Cell Line
Host Cell	CHO
Property	Adherent
Complete Growth Medium	F-12K + 10% FBS
Selection Marker	Puromycin (2 µg/mL)
Incubation	37°C with 5% CO <sub>2</sub>
Doubling Time	22-24 hours
Transduction Technique	Lentivirus

## CHO/Human STEAP1 Stable Cell Line Development Service Data Sheet

### • *Materials Required for Cell Culture*

- F-12K Nutrient Mixture (Gibco, Cat. No. 21127-022)
- Fetal bovine serum (CellMax, Cat. No. SA211.02)
- Puromycin (InvivoGen, Cat. No. ant-pr-5b)
- 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: F-12K + 10% FBS, 1% P/S
- Culture Medium: F-12K + 10% FBS, Puromycin (2 µg/mL), 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)
- CO<sub>2</sub> Incubator (Thermo, 3111)
- Biological Safety Cabinet (Thermo, 1389)

# CHO/Human STEAP1 Stable Cell Line Development Service 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 complete growth medium and spin at approximately 1000 rpm for 5 minutes.
4. Resuspend cell pellet with 5 mL complete growth medium and transfer the cell suspension into T-75 flask containing 10-15 mL of pre-warmed complete growth medium.
5. Incubate at 37°C with 5% CO<sub>2</sub> 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 3 mL of 0.25% trypsin to cell culture flask. Place the flask at 37°C for 5-7 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% CO<sub>2</sub> incubator.

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

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

**Note:** After recovery for 1-2 generations with the complete growth medium not containing the selection marker, if the cell state is well, changing to the culture medium containing the selection marker.

# CHO/Human STEAP1 Stable Cell Line Development Service Data Sheet

## • *Cryopreservation*

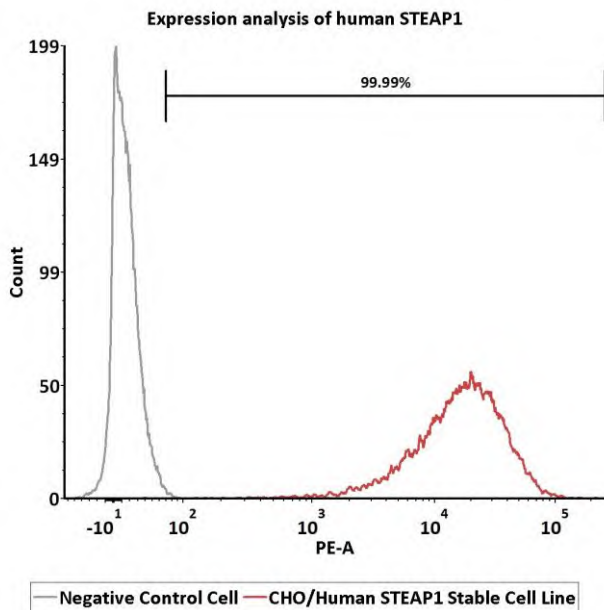
1. Remove and discard spent medium.
2. Detach cells from the cell culture flasks with 0.25% trypsin.
3. Centrifuge at 1000 rpm for 5 min at RT to pellet cells.
4. Resuspend the cell pellets with complete growth medium and count viable cells.
5. Centrifuge at 1000 rpm for 5 min at RT and resuspend cells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

## • *Storage*

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

# CHO/Human STEAP1 Stable Cell Line Development Service Data Sheet

• *Receptor Assay*



Catalog No.	Stable Cell Line	MFI for STEAP1 (PE)
NA	Negative Control Cell	10.38
<b>SCCHO-ATP121</b>	<b>CHO/Human STEAP1 Stable Cell Line</b>	<b>16596.44</b>

**Fig1. Expression analysis of human STEAP1 on CHO/Human STEAP1 Stable Cell Line by FACS.** Cell surface staining was performed on CHO/Human STEAP1 Stable Cell Line or negative control cell using anti-human STEAP1 antibody followed by staining with PE anti-human IgG Fc Antibody.

# CHO/Human STEAP1 Stable Cell Line Development Service 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 CEACAM5 Stable Cell Line	CHEK-ATP083
HEK293/Human DLL3 Stable Cell Line	CHEK-ATP090
HEK293/Human ROR1 Stable Cell Line	CHEK-ATP084
HEK293/Human FOLR1 Stable Cell Line	CHEK-ATP091
HEK293/Human Glypican-3 (GPC3) Stable Cell Line	CHEK-ATP092
CHO/Human Mesothelin Stable Cell Line Development Service	SCCHO-ATP120
CHO/Human Glypican-3 (GPC3) Stable Line Development Service	SCCHO-ATP112