

# HEK293/Human TMPRSS2-HA-P2A-mGFP Stable Cell Line

## HEK293/Human TMPRSS2-HA-P2A-mGFP Stable Cell Line

Catalog No.	Size
CHEK-ATP101	2 × (1 vial contains ~5×10 <sup>6</sup> cells)

### • Description

HEK293/Human TMPRSS2-HA-P2A-mGFP Cell Line was engineered to express full length human TMPRSS2 (Gene ID: 7113) with C terminal HA tag and mGFP by a viral P2A self-cleaving peptide. Surface expression of human TMPRSS2 was confirmed by flow cytometry.

### • Application

- Useful for cell-based TMPRSS2 binding assay

### • Cell Line Profile

Cell line	HEK293/Human TMPRSS2-HA-P2A-mGFP Stable Cell Line
Host Cell	HEK293
Property	Adherent
Complete Growth Medium	DMEM + 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

## HEK293/Human Tmprss2-HA-P2A-mGFP Stable Cell Line

### • *Materials Required for Cell Culture*

- DMEM medium (Gibco, Cat.No.11965-092)
- Fetal bovine serum (CellMax, Cat.No.SA211.02)
- Puromycin (InvivoGen, Cat.No.ant-pr-5b)
- Complete Growth Medium: DMEM + 10% FBS
- Culture Medium: DMEM + 10% FBS, Puromycin (2 µg/mL)
- 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)

### • *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. Discard the supernatant and 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.

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### • *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% 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.

### • *Cryopreservation*

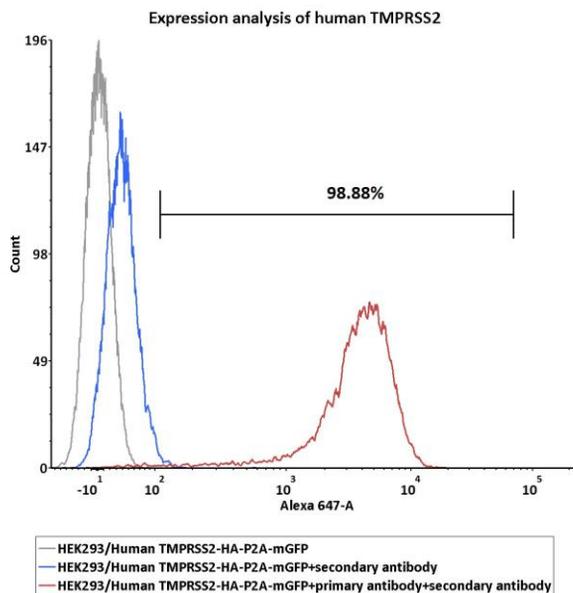
1. Remove and discard spent medium.
2. Detach cells from the cell culture flasks with 0.25% trypsin.
3. Centrifuge at 1000 rpm for 5 min at RT to pellet cells.
4. Resuspend the cell pellets with complete growth medium and count viable cells.
5. Centrifuge at 1000 rpm for 5 min at RT and resuspend cells 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°C freezer overnight, then transferring to liquid nitrogen storage.

### • *Storage*

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

# HEK293/Human TMPRSS2-HA-P2A-mGFP Stable Cell Line

## • Receptor Assay



Catalog No.	Stable Cell Line	MFI for TMPRSS2 (Alexa Fluor® 647)
CHEK-ATP101	HEK293/Human TMPRSS2-HA-P2A-mGFP Stable Cell Line+ secondary antibody	34.59
CHEK-ATP101	HEK293/Human TMPRSS2-HA-P2A-mGFP Stable Cell Line+ primary antibody +secondary antibody	3844.36

**Fig1. Expression analysis of human TMPRSS2 on HEK293/Human TMPRSS2-HA-P2A-mGFP Stable Cell Line by FACS.**

Cell surface staining was performed on HEK293/Human TMPRSS2-HA-P2A-mGFP Stable Cell Line or negative control cell.

Recombinant Anti-TMPRSS2 antibody was used as the primary antibody.

Goat Anti-Rabbit IgG H&L (Alexa Fluor® 647) was used as the secondary antibody.

## • License Disclosure

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