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HEK293/Human GIPR Stable Cell Line (Medium Expression)

Catalog No.	Size
CHEK-ATP207	$2 \times (1 \text{ vial contains} \sim 5 \times 10^{6} \text{ cells})$

• Description

The HEK293/Human GIPR Stable Cell Line was engineered to express the receptor full length human GIPR (Gene ID: 2696), with different levels of GIPR expression (High, Medium, Low). Surface expression of human GIPR was confirmed by flow cytometry.

• Application

- Useful for cell-based GIPR binding assay
- Screen for human GIPR agonists based on cAMP accumulation assay

• Cell Line Profile

Cell line	HEK293/Human GIPR Stable Cell Line (Medium Expression)	
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	



• 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) in China, 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)
- 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)



• 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% 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.

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.

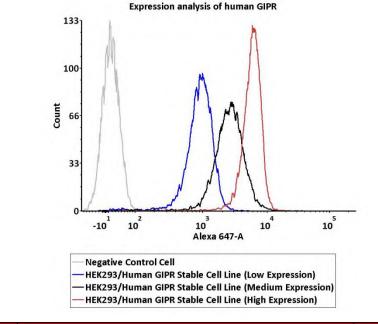


• Cryopreservation

- 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 5×10^6 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



• Receptor Assay



Catalag Na	Stable Call Line	MFI for GIPR
Catalog No.	Stable Cell Line	(Alexa Fluor® 647)
CHEK-ATP208	HEK293/Human GIPR Stable Cell Line (Low Expression)	897.15
CHEK-ATP207	HEK293/Human GIPR Stable Cell Line (Medium Expression)	2495.80
CHEK-ATP206	HEK293/Human GIPR Stable Cell Line (High Expression)	5716.90

Fig1. Expression analysis of human GIPR on HEK293/Human GIPR Stable Cell Line by FACS. Cell surface staining using Alexa Fluor® 647-labeled anti-human GIPR antibody was performed on HEK293/Human GIPR Stable Cell Line with different expression levels: HEK293/Human GIPR Stable Cell Line (Low Expression); HEK293/Human GIPR Stable Cell Line (Medium Expression); HEK293/Human GIPR Stable Cell Line (High Expression).



<u>Products</u>	<u>Cat.No.</u>
HEK293/Human GIPR Stable Cell Line (High Expression)	CHEK-ATP206
HEK293/Human GIPR Stable Cell Line (Low Expression)	CHEK-ATP208
HEK293/Human GLP-1R Stable Cell Line (High Expression)	CHEK-ATP160
HEK293/Human GLP-1R Stable Cell Line (Medium Expression)	CHEK-ATP161
HEK293/Human GLP-1R Stable Cell Line (Low Expression)	CHEK-ATP162
HEK293/Human ASGR1 Stable Cell Line	CHEK-ATP080
Human GLP-1R (Luc) HEK293 Reporter Cell	CHEK-ATF096
Human GCGR (Luc) HEK293 Reporter Cell	CHEK-ATF103
Human GIPR (Luc) HEK293 Reporter Cell	CHEK-ATF104
Human FGF-21 (Luc) HEK293 Reporter Cell	CHEK-ATF163
Human Activin RII (Luc) HEK293 Reporter Cell	CHEK-ATF164
HEK293/Human ASGR1&ASGR2 Stable Cell Line	CHEK-ATP172
HEK293/Human GPR75 Stable Cell Line	CHEK-ATP174
Human THRB (Luc) HEK293 Reporter Cell	CHEK-ATF181
Human THRA (Luc) HEK293 Reporter Cell	CHEK-ATF180
HEK293/Human GLP-1R&GIPR Stable Cell Line	CHEK-ATP205