

CHO/Human PD-L1 Stable Cell Line (High Expression) Development Service

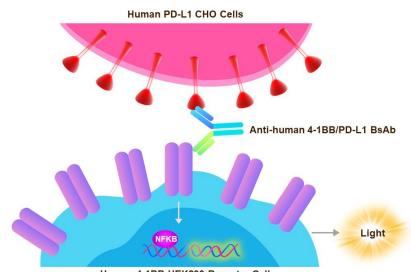
Catalog No.	Size	
SCCHO-ATP077H	$2 \times (1 \text{ vial contains} \sim 5 \times 10^{6} \text{ cells})$	

• Description

The CHO/ Human PD-L1 Stable Cell Line was engineered to express full length human PD-L1 receptor (Gene ID: 29126), with different levels of PD-L1 expression (High, Medium, Low), which can be used to mimic cancer target cells with various PD-L1 expression levels. When co-cultured with Human 4-1BB (Luc) HEK293 Reporter Cell (Cat.No.CHEK-ATF073) and anti-human 4-1BB/PD-L1 BsAb, the anti-human 4-1BB/PD-L1 BsAb can be crosslinked, thereby strengthening 4-1BB pathway-activated luminescence.

Application

- Useful for cell-based PD-L1 binding assay
- Useful for PD-L1-mediated crosslinking in reporter gene assay



Human 4-1BB HEK293 Reporter Cell



• Cell Line Profile

Cell line	CHO/Human PD-L1 Stable Cell Line (High Expression)		
Host Cell	СНО		
Property	Adherent		
Complete Growth Medium	F-12K + 10% FBS		
Selection Marker	Puromycin (2 µg/mL)		
Incubation	37°C with 5% CO ₂		
Doubling Time	22-24 hours		
Transduction Technique	Lentivirus		

• 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
- Culture Medium: F-12K + 10% FBS, Puromycin (2 μ g/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)
- CO₂ 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. 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 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% CO₂ incubator.

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

Medium Renewal: Every 2 to 3 days.



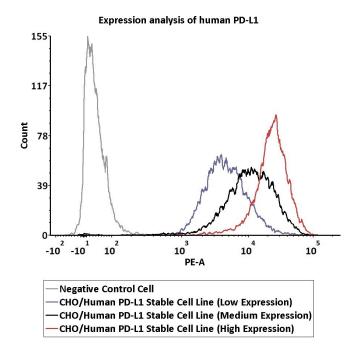
- Cryopreservation
- 1. Remove and discard spent medium.
- 2. Detach cells from the cell culture flasks with 0.25% trypsin.
- 3. Centrifuge at 1000 rpm for 5 min at RT to pellet cells.
- 4. Resuspend the cell pellets with culture medium and count viable cells.
- 5. Centrifuge at 1000 rpm for 5 min at RT and resuspend cells in freezing medium to a concentration of 5×10^6 to 1×10^7 cells/mL.
- 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



Catalog No.	Stable Cell Line	MFI for PD-L1 (PE)
SCCHO-ATP077L	CHO/Human PD-L1 Stable Cell Line (Low Expression)	4193.33
SCCHO-ATP077M	CHO/Human PD-L1 Stable Cell Line (Medium Expression)	10543.80
SCCHO-ATP077H	CHO/Human PD-L1 Stable Cell Line (High Expression)	22783.64

Fig1. Expression analysis of human PD-L1 on CHO/ Human PD-L1 Stable Cell Line by FACS. Cell surface staining using PE-labeled anti-human PD-L1 antibody was performed on CHO/Human PD-L1 Stable Cell Line with different expression levels: CHO/Human PD-L1 Stable Cell Line (Low Expression); CHO/Human PD-L1 Stable Cell Line (Medium Expression); CHO/Human PD-L1 Stable Cell Line (High Expression).



Cat.No.

CHO/Human PD-L1 Stable Cell Line (High Expression) Development Service Data Sheet

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Related Products

Products

CHO/Human CD16a (158V) Stable Cell Line (Low Expression) Development Service SCCHO-ATP059L CHO/Human CD16a (158V) Stable Cell Line (Medium Expression) Development Service SCCHO-ATP059M CHO/Human CD16a (158V) Stable Cell Line (High Expression) Development Service SCCHO-ATP059H CHO/Human CD32b Stable Cell Line (Low Expression) Development Service SCCHO-ATP060L CHO/Human CD32b Stable Cell Line (Medium Expression) Development Service SCCHO-ATP060M CHO/Human CD32b Stable Cell Line (High Expression) Development Service SCCHO-ATP060H CHO/Human CD32a Stable Cell Line (Low Expression) Development Service SCCHO-ATP061L CHO/Human CD32a Stable Cell Line (Medium Expression) Development Service SCCHO-ATP061M CHO/Human CD32a Stable Cell Line (High Expression) Development Service SCCHO-ATP061H SCCHO-ATP062L CHO/Human CD64 Stable Cell Line (Low Expression) Development Service CHO/Human CD64 Stable Cell Line (Medium Expression) Development Service SCCHO-ATP062M CHO/Human CD64 Stable Cell Line (High Expression) Development Service SCCHO-ATP062H CHO/Human PD-L1 Stable Cell Line (Low Expression) Development Service SCCHO-ATP077L CHO/Human PD-L1 Stable Cell Line (Medium Expression) Development Service SCCHO-ATP077M Human 4-1BB (Luc) HEK293 Reporter Cell CHEK-ATF073