

CHO/Human CD32a Stable Cell Line (High Expression)

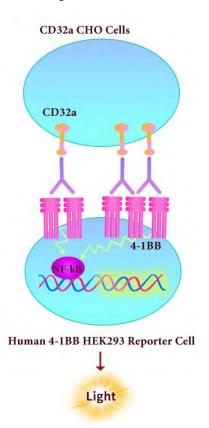
Catalog No.	Size
SCCHO-ATP061H	$2 \times (1 \text{ vial contains } \sim 5 \times 10^6 \text{ cells})$

• Description

The CHO/Human CD32a Stable Cell Line was engineered to express full length human CD32a receptor (Gene ID: 2212), with different levels of CD32a expression (High, Medium, Low), which can be used to test agonist antibody whether in a CD32a-dependent manner to strengthen the agonistic activity. When co-cultured with Human 4-1BB HEK293 Reporter Cell and anti-4-1BB agonist antibody, the anti-4-1BB antibody can be crosslinked, thereby strengthening 4-1BB pathway-activated luminescence.

• Application

- Useful for cell-based CD32a binding assay
- Useful for CD32a-mediated crosslinking





• Cell Line Profile

Cell line	CHO/Human CD32a Stable Cell Line (High Expression)	
Host Cell	СНО	
Property	Adherent	
Complete Growth Medium	F-12K + 10% FBS	
Selection Marker	Hygromycin (20 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)
- Hygromycin B (Invitrogen, Cat.No.10687010)
- Complete Growth Medium: F-12K + 10% FBS
- Culture Medium: F-12K + 10% FBS, Hygromycin (20 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)
- 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

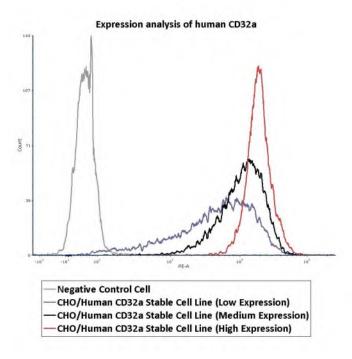
- 1. Remove and discard spent medium.
- 2. Detach cells from the cell culture flasks with 0.25% trypsin.
- 3. Centrifuge at 1000 rpm for 5 min at RT to pellet cells.
- 4. Resuspend the cell pellets with complete growth medium and count viable cells.
- 5. Centrifuge at 1000 rpm for 5 min at RT and resuspend 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



Catalog No.	Stable Cell Line	MFI for CD32a (PE)
SCCHO-ATP061L	CHO/Human CD32a Stable Cell Line (Low Expression)	5196.88
SCCHO-ATP061M	CHO/Human CD32a Stable Cell Line (Medium Expression)	11336.11
SCCHO-ATP061H	CHO/Human CD32a Stable Cell Line (High Expression)	18309.90

Fig1. Expression analysis of human CD32a on CHO/Human CD32a Stable Cell Line (High Expression) by FACS. Cell surface staining using PE-labeled anti-human CD32a antibody was performed on CHO/Human CD32a Stable Cell Line with different expression levels: CHO/Human CD32a Stable Cell Line (Low Expression); CHO/Human CD32a Stable Cell Line (Medium Expression); CHO/Human CD32a Stable Cell Line (High Expression).



• License Disclosure

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• Related Products

<u>Products</u>	<u>Cat.No.</u>
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 CD64 Stable Cell Line (Low Expression) Development Service	SCCHO-ATP062L
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
CHO/Human PD-L1 Stable Cell Line (High Expression) Development Service	SCCHO-ATP077H