

# Product Sheet

## H\_FCGR2B(CD32B) CHO-K1 Cell Line

Catalog number: GM-C16925

Version 3.3.1.260519

<b>Description</b>	H_FCGR2B(CD32B) CHO-K1 Cell Line is a clonal stable CHO-K1 cell line that constitutively expresses the human FCGR2B(CD32B) gene, constructed using lentiviral technology.
<b>Quantity</b>	5E6 Cells per vial, 1 mL
<b>Product Format</b>	1 vial of frozen cells
<b>Shipping</b>	Shipped on dry ice
<b>Storage Conditions</b>	Liquid nitrogen immediately upon receipt
<b>Target</b>	Human_FCGR2B(CD32B)
<b>Gene ID/Uniprot ID</b>	P31994-1
<b>Host Cell</b>	CHO-K1
<b>Recovery Medium</b>	F12K+10% FBS+1% P.S
<b>Growth medium</b>	F12K+10% FBS+1% P.S+4 µg/mL Puromycin
<b>Note</b>	None
<b>Freezing Medium</b>	90% FBS+10% DMSO
<b>Growth properties</b>	Adherent
<b>Growth Conditions</b>	37°C, 5% CO <sub>2</sub>
<b>Mycoplasma Testing</b>	The cell line has been screened to confirm the absence of Mycoplasma species.
<b>Safety considerations</b>	Biosafety Level 2
<b>Note</b>	It is recommended to expand the cell culture and store a minimum of 10 vials at an early passage for potential future use.

## Materials

Reagent	Manufacturer/Catalogue No.
RPMI 1640	gibco/C11875500BT
F12K	BOSTER/PYG0036
Fetal Bovine Serum	ExCell/FSP500
Pen/Strep	Thermo/15140-122
Puromycin	Genomeditech/GM-040401
APC anti-human CD32B/C	Biolegend/398304
Anti-H_BDCA2 hIgG1 Antibody(Litifilimab)	Genomeditech/GM-31294AB
H_BDCA2 Reporter Jurkat Cell Line	Genomeditech/GM-C13225
GMOne-Step 2.0 Luciferase Reporter Gene Assay Kit	Genomeditech/GM-040513

## Figures

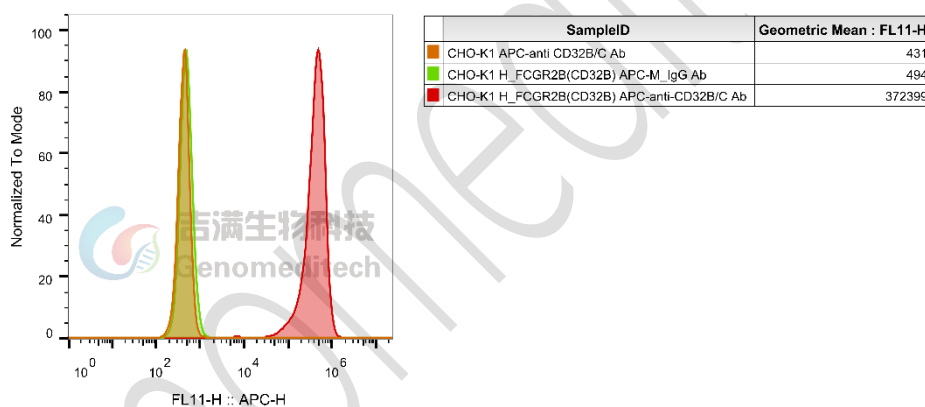


Figure 1 | H\_FCGR2B(CD32B) CHO-K1 Cell Line (Cat. GM-C16925) was determined by flow cytometry using APC anti-human CD32B/C (BioLegend/398304).

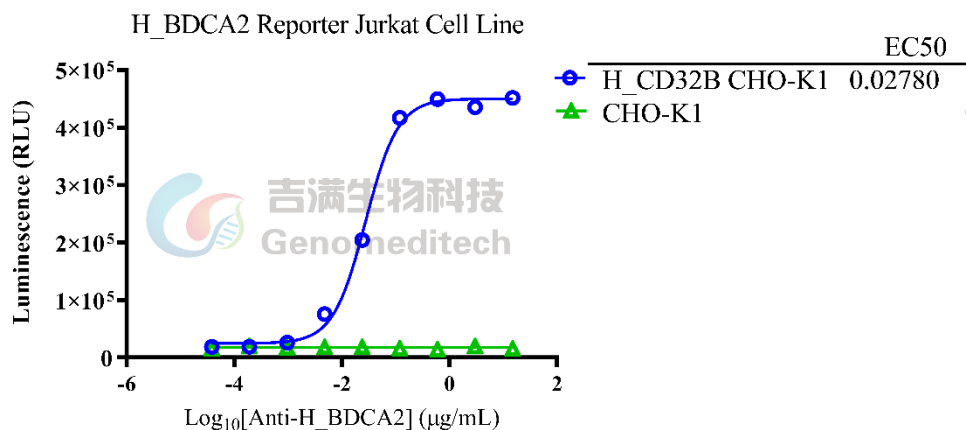


Figure 2 | Response to Anti-H\_BDCA2 hIgG1 Antibody. The H\_FCGR2B (CD32B) CHO-K1 Cell Line (Cat. GM-C16925) and the CHO-K1 Cell Line were seeded at a density of 1E4 cells per well in a 96-well plate and incubated overnight. The next day, serial dilutions of Anti-H\_BDCA2 hIgG1 Antibody (Litifilimab, Cat. GM-31294AB) and the H\_BDCA2 Reporter Jurkat Cell Line (Cat. GM-C13225) at a concentration of 1E5 cells per well were added to the pre-seeded cells. The mixture was incubated for an additional 16 hours. Firefly luciferase activity was measured using the Luciferase Reporter Assay Kit (Genomeditech). The maximum induction fold was approximately [26.7]. Data are presented based on drug mass concentration.

## Cell Recovery

Recovery Medium: F12K+10% FBS+1% P.S

To insure the highest level of viability, thaw the vial and initiate the culture as soon as possible upon receipt. If upon arrival, continued storage of the frozen culture is necessary, it should be stored in liquid nitrogen vapor phase and not at -70°C. Storage at -70°C will result in loss of viability.

- Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the O-ring and cap out of the water. Thawing should be rapid (approximately 2 - 3 minutes).
- Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% ethanol. All of the operations from this point on should be carried out under strict aseptic conditions.
- Transfer the vial contents to a centrifuge tube containing 5.0 mL complete culture medium and spin at approximately 176 x g for 5 minutes. Discard supernatant.
- Resuspend cell pellet with the recommended recovery medium. And dispense into appropriate culture dishes.
- Incubate the culture at 37°C in a suitable incubator. A 5% CO<sub>2</sub> in air atmosphere is recommended if using the medium described on this product sheet.

## Cell Freezing

Freezing Medium: 90% FBS+10% DMSO

- Centrifuge at 176 x g for 3 minutes to collect cells.
- Resuspend the cells in pre-cooled freezing medium and adjust the cell density to 5E6 cells/mL.

- c) Aliquot 1 mL into each vial.
- d) Place the vial in a controlled-rate freezing container and store at -80°C for at least 1 day, then transfer to liquid nitrogen as soon as possible.

## Cell passage

Growth medium: F12K+10% FBS+1% P.S+4 µg/mL Puromycin

For the first 1 to 2 passages post-resuscitation, use the recovery medium. Once the cells have stabilized, switch to a growth medium.

- a) Remove and discard culture medium.
- b) Briefly rinse the cell layer with PBS to remove all traces of serum that contains trypsin inhibitor.
- c) Add 1.0 mL of 0.25% (w/v) Trypsin-EDTA solution to dish and observe cells under an inverted microscope until cell layer is dispersed (usually within 2 to 3 minutes at 37°C).
- d) Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal.
- e) Add 2.0 mL of growth medium to mix well and aspirate cells by gently pipetting.
- f) After centrifugation, resuspend the pellet and add appropriate aliquots of the cell suspension to new culture vessels.
- g) Incubate cultures at 37°C.

**Subcultivation Ratio: A subcultivation ratio of 1:4 - 1:5 is recommended**

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

## Notes

- a) After the stabilization of the cell condition, there will be fewer dead cells post-passage, the cell growth rate will tend to stabilize, cell morphology will become uniform, and the cells will appear robust.

## Sequence

FCGR2B(CD32B) [P31994-1](#)

MGILSFLPVLATESDWADCKSPQPWGHMLLWTAVLFLAPVAGTPAAPPKAVLKLEPQWINVLQEDSVTLTC  
RGTHSPESDSIQWFHNGNLIPTHTQPSYRFKANNNSGGEYTCQTGQTSLSDPVHLTVLSEWLVLQTPHLEFQE  
GETIVLRCHSWKDKPLVKVTFQNGSKKFSRSDPNFSIPQANHSHSGDYHCTGNIGYTYSSKPVTITVQAPS  
SSPMGIIVAVVTGIAVAAIVAAVVALIYCRKKRISALPGYPECREMGETLPEKPANPTNPDEADKVG AENTITY  
SLLMHPDALEEPDDQNRI

## Related Products

FcγR	
<a href="#">H_CD32B aAPC CHO-K1 Cell Line</a>	<a href="#">Cynomolgus_FcRn MDCK Cell Line</a>
<a href="#">H_FCGR1A(CD64) CHO-K1 Cell Line</a>	<a href="#">H_FCGR1A(CD64) HEK-293 Cell Line</a>
<a href="#">H_FCGR2A(CD32A) CHO-K1 Cell Line</a>	<a href="#">H_FCGR3A(CD16a) 158F CHO-K1 Cell Line</a>

H_FCGR3A(CD16a) 158V CHO-K1 Cell Line	H_FCGR3B(CD16b) CHO-K1 Cell Line
H_FcRn CHO-K1 Cell Line	H_FcRn MDCK Cell Line
H_FcRn-GFP HEK-293 Cell Line	Mouse_FcgRIV FcgRIIb aAPC CHO-K1 Cell Line
Mouse_FcRn MDCK Cell Line	
Anti-FcRn hIgG4 Reference Antibody(Rozabio)	Anti-H_FcRn IgG4 Antibody(Rozanolixumab)
Anti-Mouse CD16/32 mIgG2b Antibody(2.4G2)	
Human IgG1 Fc Protein; His Tag	
<b>ADCCP</b>	
ADCC FcγRIIIa(158F) Jurkat Effector Cell Line	ADCC FcγRIIIa(158V) DDX35TM Jurkat Effector Cell Line
ADCC FcγRIIIa(158V) Jurkat Effector Cell Line	ADCC FcγRIIIa(158V) Reporter Jurkat(CD3 KO) Cell Line
ADCC FcγRIIIa(158V) Reporter NK-92 Cell Line	ADCC M_FcγRIV Jurkat Effector Cell Line
ADCP FcγRI Jurkat Effector Cell Line	ADCP FcγRIIa DDX35TM Jurkat Effector Cell Line
ADCP FcγRIIa Jurkat Effector Cell Line	ADCP FcγRIIa R131 Jurkat Effector Cell Line
ADCP FcγRIIb Jurkat Effector Cell Line	

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