

Product Sheet

H_CD20 KO RAMOS Cell Line

Catalog number: GM-C45171

Version 3.3.1.260527

Description	H_CD20 KO RAMOS Cell Line is a clonal stable cell line derived from RAMOS cells with a knockout of human CD20
Quantity	5E6 Cells per vial, 1 mL
Product Format	1 vial of frozen cells
Shipping	Shipped on dry ice
Storage Conditions	Liquid nitrogen immediately upon receipt
Target	Human_CD20
Gene ID/Uniprot ID	/
Host Cell	RAMOS
Recovery Medium	RPMI 1640+10% FBS+1% P.S
Growth medium	RPMI 1640+10% FBS+1% P.S+10 µg/mL Blasticidin+0.25 µg/mL Puromycin
Note	None
Freezing Medium	90% FBS+10% DMSO
Growth properties	Suspension
Growth Conditions	37°C, 5% CO ₂
Mycoplasma Testing	The cell line has been screened to confirm the absence of Mycoplasma species.
Safety considerations	Biosafety Level 2
Note	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
Fetal Bovine Serum	ExCell/FSP500
Pen/Strep	Thermo/15140-122
Puromycin	Genomeditech/GM-040401
Blasticidin	Genomeditech/GM-040404
Anti-CD20 mIgG2a Antibody (ocrelizumab)	Genomeditech/GM-88845AB
Anti-CD20 mIgG2a Antibody (rituximab)	Genomeditech/GM-88846AB

Figures

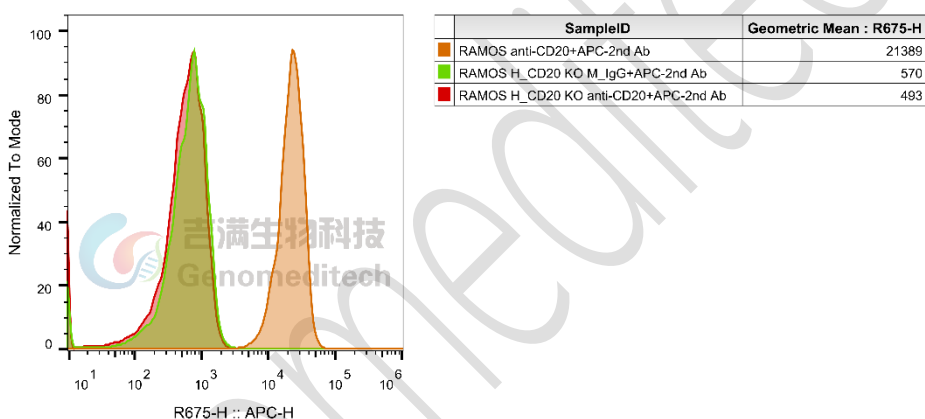


Figure 1 | H_CD20 KO RAMOS Cell Line (Cat. GM-C45171) was determined by flow cytometry using Anti-CD20 mIgG2a Antibody (ocrelizumab) (Cat. GM-88845AB).

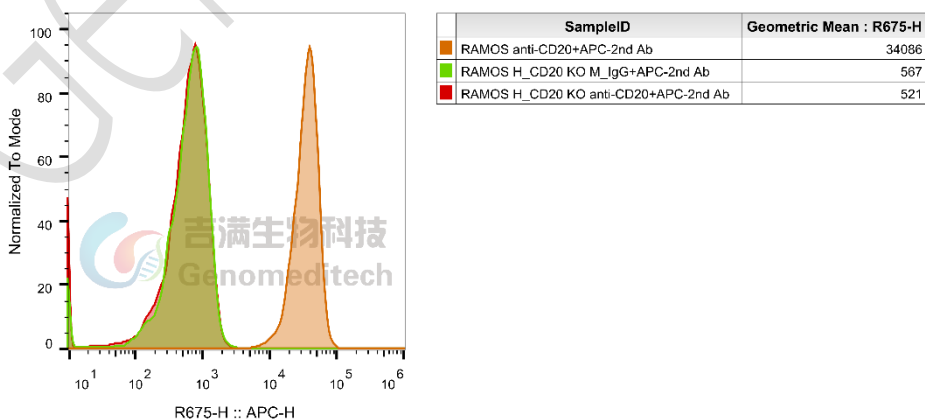


Figure 2 | H_CD20 KO RAMOS Cell Line (Cat. GM-C45171) was determined by flow cytometry using Anti-CD20 mIgG2a Antibody (rituximab) (Cat. GM-88846AB).



Figure 3 | The Sanger sequencing of the H_CD20 KO RAMOS Cell Line showed successful knockout of CD20.

Cell Recovery

Recovery Medium: RPMI 1640+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 $176 \times g$ 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_2 in air atmosphere is recommended if using the medium described on this product sheet.

Cell Freezing

Freezing Medium: 90% FBS+10% DMSO

- Centrifuge at $176 \times g$ for 3 minutes to collect cells.
- Resuspend the cells in pre-cooled freezing medium and adjust the cell density to 5×10^6 cells/mL.
- Aliquot 1 mL into each vial.
- 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: RPMI 1640+10% FBS+1% P.S+10 µg/mL Blasticidin+0.25 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.

- After the first resuscitation, the cells can be subcultured after approximately 2–3 days. After 1 to 2 passages, the culture medium can be changed to a growth medium supplemented with antibiotics. If passage is not possible within 3 days, it is recommended to supplement with recovery medium as appropriate and place the flask in a horizontal position.
- When the cell density reaches 8E5 cells/mL, perform a 1:3 split, and continue subculturing every 2–3 days. Do not allow the cell density to exceed 1E6 cells/mL. It is recommended to use T25 flasks for passaging and culture.
- These cells are suspension cells, and it is recommended to use the "half-medium change" method to maintain optimal cell conditions during passaging.
- During passaging, you can directly add fresh growth medium to the culture flask, gently pipette to resuspend the cells, and then transfer the cell suspension to a new T-25 flask for continued culture.

Subcultivation Ratio: Maintain cultures at a cell concentration between 4E5 and 8E5 viable cells/mL.

Medium Renewal: Every 2 to 3 days

Notes

- The cell line is density-sensitive; during routine culture and passaging, maintain the cell density within an appropriate range.
- FBS should be heat-inactivated at 56°C for 30 minutes to inactivate complement and certain viruses, with minimal impact on most growth factor and cytokine activities.

Related Products

CD20(MS4A1)	
ADCC FcγRIIIa(158V) Jurkat Effector Cell Line	Cynomolgus_CD20 CHO-K1 Cell line
H_CD20 CHO-K1 Cell Line	H_CD20 HEK-293 Cell Line
Mouse_CD20 CHO-K1 Cell Line	
Anti-CD20 hIgG1 Reference Antibody (Ocrebio)	Anti-CD20 hIgG1 Reference Antibody(Ritubio)
Anti-CD3×CD20 hIgG1 Bispecific Antibody (Epcobio)	Anti-H_MS4A1(CD20) hIgG1 Antibody(Ocrelizumab)
CD19	
H_CD19 KO Raji Cell Line	Cynomolgus_CD19 CHO-K1 Cell Line
Cynomolgus_CD19 HEK-293 Cell Line	H_CD19 CHO-K1 Cell line
H_CD19 HEK-293 Cell Line	Mouse_CD19 CHO-K1 Cell Line
Anti-CD19 hIgG1 Reference Antibody (Loncbio)	Anti-CD19×CD3 hIgG1 Antibody[PIT-565(CD58 K34A)]
Anti-H_CD19 hIgG1/hIgG2 Antibody(Tafasitamab)	
CD3	
ADCC FcγRIIIa(158V) Reporter Jurkat(CD3 KO) Cell Line	Jurkat CD3-BsAb Reporter Cell Line

Cynomolgus_CD3 HEK-293 Cell Line	Cynomolgus_CD3E(Membrane Bound ECD) CHO-K1 Cell Line
H_CD3 CHO-K1 Cell Line	H_CD3 HEK-293 Cell Line
H_CD3(TCR V2) CHO-K1 Cell Line	H_CD3(TCR V2) HEK-293 Cell Line
H_CD3D CD3E KO Jurkat Cell Line	H_CD3E KO Jurkat Cell Line
H_CD3E(Membrane Bound ECD) CHO-K1 Cell Line	Mouse_CD3 HEK-293 Cell Line
Anti-CD19×CD3 hIgG1 Antibody[PIT-565(CD58 K34A)]	Anti-CD3 epsilon hIgG1 Antibody [OKT-3 (muromonab)]
Anti-CD3 hIgG1 Antibody(CH2527)	Anti-CD3×CD20 hIgG1 Bispecific Antibody (Epcobio)
Anti-CD3×FCRL5 hIgG1 Bispecific Antibody(cevostamab)	Anti-CD3E×BCMA hIgG4 Reference Antibody (Tecbio)
Anti-CD3E×DLL3 hIgG1 Bispecific Antibody(Tarlabio)	Anti-CD3E×MUC17 hIgG1 Bispecific Antibody(Vepsitbio)
Anti-mouse CD3ε mIgG2a Antibody(145-2C11)	

License Agreement:

By purchasing and using this cell line product, the user voluntarily agrees to accept and abide by the following policies:

- This cell line product is restricted to research use only and shall not be used for any commercial purposes.
- This product is strictly prohibited from being used in the diagnosis or treatment of human or animal diseases, and shall not be directly used in experiments involving humans.
- Users and their contractors engaged for their benefit may use this material and its derivatives only within the agreed research scope; modification of the material is not permitted, nor may it be distributed, sold, transferred, or otherwise provided to any other entity (including affiliates).
- If use beyond the above scope is required, prior written permission from Genomeditech (Shanghai) Co.,Ltd. must be obtained. For details, please contact Genomeditech (Shanghai) Co.,Ltd.