Genomeditech (Shanghai) Co.,Ltd.
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Product Sheet

H_CLDN18.2 MKN45 Cell Line(Low Expression)

Catalog number: GM-C29874

Version 3.3.1.260126

Description	H_CLDN18.2 MKN45 Cell Line(Low Expression) is a clonal stable MKN45 cell line that constitutively expresses the human CLDN18.2 gene, constructed using lentiviral technology.
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_CLDN18.2 & C-3×Flag
Gene ID/Uniprot ID	NP_001002026.1
Host Cell	MKN45
Recovery Medium	RPMI 1640+20% FBS+1% P.S
Growth medium	RPMI 1640+20% FBS+1% P.S+1 μg/mL Puromycin
Note	None
Freezing Medium	90% FBS+10% DMSO
Growth properties	Mixed: adherent and 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.

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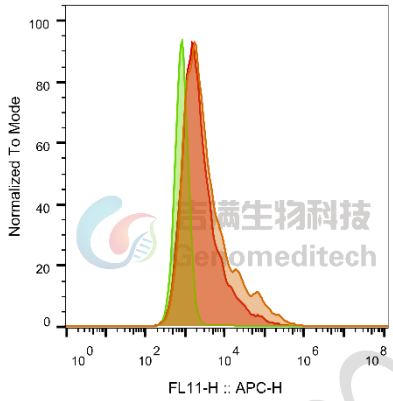
Materials

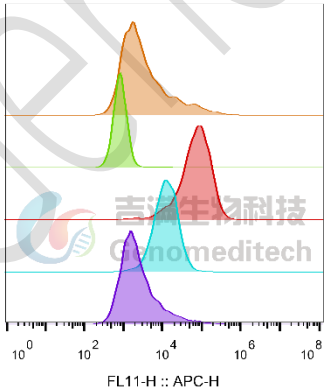
Reagent	Manufacturer/Catalogue No.
RPMI 1640	VivaCell/C3010-0500
Fetal Bovine Serum	ExCell/FSP500
Pen/Strep	Thermo/15140-122
Puromycin	Genomeditech/GM-040401
Anti-CLDN18.2	In house

Figures



SampleID	Geometric Mean : FL11-H
MKN45 anti-CLDN18.2+APC-2nd Ab	3508
MKN45 H_CLDN18.2 H_IgG+APC-2nd Ab	879
MKN45 H_CLDN18.2 anti-CLDN18.2+APC-2nd Ab	2461

Figure 1 | H_CLDN18.2 MKN45 Cell Line(Low Expression) (Cat. GM-C29874)was determined by flow cytometry using Anti-CLDN18.2 hIgG1 Antibody (In house).



SampleID	Geometric Mean : FL11-H
MKN45 anti-CLDN18.2+APC-2nd Ab	3508
MKN45 H_CLDN18.2 H_IgG+APC-2nd Ab	879
MKN45 H_CLDN18.2 anti-CLDN18.2+APC-2nd Ab H	66943
MKN45 H_CLDN18.2 anti-CLDN18.2+APC-2nd Ab M	12185
MKN45 H_CLDN18.2 anti-CLDN18.2+APC-2nd Ab L	2461

Figure 2 | H_CLDN18.2 MKN45 Cell Line(High Expression) (Cat. GM-C29870),H_CLDN18.2 MKN45 Cell Line(Medium Expression) (Cat. GM-C29754) and H_CLDN18.2 MKN45 Cell Line(Low Expression) (Cat. GM-C29874) were determined by flow cytometry using Anti-CLDN18.2 hIgG1 Antibody (In house).

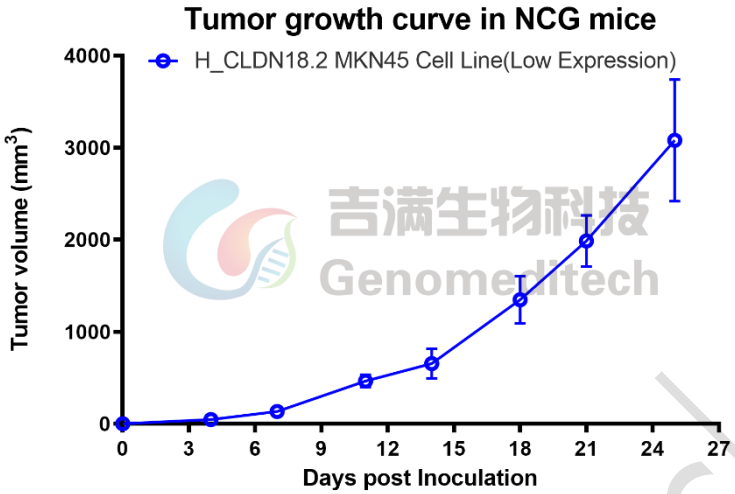


Figure 3 | Tumor growth curves of H_CLDN18.2 MKN45 in NCG mice. H_CLDN18.2 MKN45 cells (1×10^6 per mouse) were subcutaneously inoculated into NCG mice (female, 8 weeks old, n = 3). Tumor volume was measured twice per week and is presented as mean ± SEM.

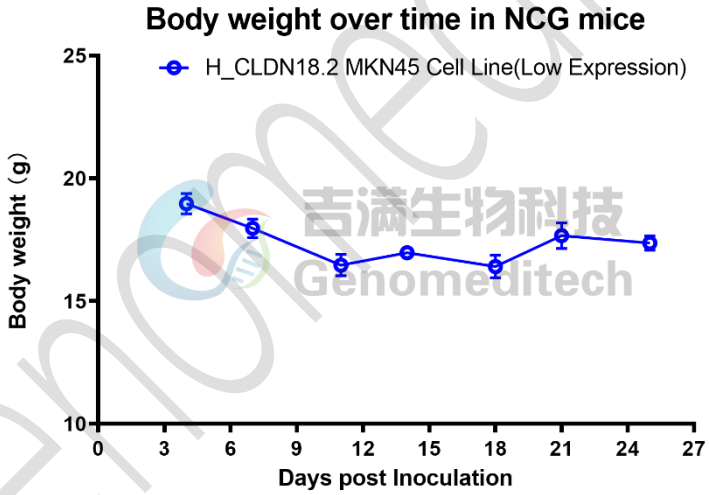


Figure 4 | Body weight changes after implantation of H_CLDN18.2 MKN45 in NCG mice. Under the same conditions, body weight was measured twice per week and is presented as mean ± SEM.

Cell Recovery

Recovery Medium: RPMI 1640+20% 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.

a) 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).
b) 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.
c) 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.
d) Resuspend cell pellet with the recommended recovery medium. And dispense into appropriate culture dishes.
e) 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

a) Centrifuge at 176 x g for 3 minutes to collect cells.
b) 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: RPMI 1640+20% FBS+1% P.S+1 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) Under normal conditions, these cells exist as both adherent and round suspension cells.
b) When changing the medium, take care to retain the suspension cells. During passaging, collect both the adherent and suspension cells together before subculturing.
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 1 to 2 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 1:3 - 1:4 is recommended

Medium Renewal: Every 2 to 3 days

Notes

a) Under normal conditions, these cells exist as both adherent and round suspension cells.

b) When changing the medium, take care to retain the suspension cells. During passaging, collect both the adherent and suspension cells together before subculturing.

c) Once cell status stabilizes, the number of dead cells will decrease after passaging, the growth rate will become stable, cell morphology will be uniform, and the cells will appear robust.

Sequence

CLDN18.2(isoform2)-3×Flag NP_001002026.1

MAVTACQGLGFVVSLIGIAGIIAATCMDQWSTQDLYNNPVTAVFNYQGLWRSCVRESSGFTECRGYFTLLGL
PAMLQAVRALMIVGIVLGAIGLLVSIFALKCIRIGSMEDSAKANMTLTSGIMFIVSGLCAIAGVSVFANMLVTN
FWMSTANMYTGMGGMVQTVQTRYTFGAALFVGWVAGGLTLIGGVMMCIACRGLAPEETNYKAVSYHAS
GHSVAYKPGGFKASTGFGSNTKNKKIYDGGARTEDEVQSYPSKHDYVGSDYKDHDGDYKDHDIDYKDDDD
K*

Related Products

CLDN18	
Cynomolgus_CLDN18.2-eGFP CHO-K1 Cell Line	H_CLDN18(isoform2)-eGFP 293 Cell Line
H_CLDN18.1-eGFP HEK-293 Cell Line	H_CLDN18.2 MC38 Cell Line
H_CLDN18.2 MKN45 Cell Line(High Expression)	H_CLDN18.2 MKN45 Cell Line(Medium Expression)
H_CLDN18.2(isoform2) CHO-K1 Cell Line	H_CLDN18.2-eGFP CT-26 Cell Line
Mouse_CLDN18.2-eGFP CHO-K1 Cell Line	Rat_CLDN18.2-eGFP CHO-K1 Cell Line
Rhesus_CLDN18.2-eGFP CHO-K1 Cell Line	
Anti-CLDN18.2 hIgG1 Reference Antibody (IMAB362)	Anti-CLDN18.2 hIgG1 Antibody(LM-102)
Anti-CLDN18.2 hIgG1 Antibody(Zolbetuximab)	
TROP2(TACSTD2)	
Cynomolgus_Trop2 CHO-K1 Cell Line	Cynomolgus_TROP2 HEK-293 Cell Line
H_TROP2 CHO-K1 Cell Line	H_TROP2 CT26 Cell Line
H_TROP2 HEK-293 Cell Line	H_TROP2 LLC1 Cell Line
H_TROP2 MC38 Cell Line	
Anti-H_TROP2 hIgG1 Antibody(Datopotamab)	Anti-TROP2 hIgG1 Antibody(Hu2G10-5)
Anti-Trop2 hIgG1 Reference Antibody (Sacbio)	Anti-Trop2 hIgG1 Reference Antibody(Datbio)
Anti-Trop2-DXD ADC(Dar4)[Datopotamab deruxtecan,Dato-DXD]	Anti-Trop2-SN38 ADC(Dar8)[Sacituzumab govitecan]
Biotinylated Cynomolgus TROP2 Protein; His-Avi Tag	Biotinylated Human TROP2 Protein; His-Avi Tag
Human TROP2 Protein; His Tag	
GUCY2C(GC-C)	
Cynomolgus_GUCY2C HEK-293 Cell Line	H_GUCY2C CHO-K1 Cell Line
H_GUCY2C HEK-293 Cell Line	
Anti-H_GUCY2C hIgG1 Antibody(Indusatumab)	
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_CD3D CD3E KO Jurkat Cell Line	H_CD3E(Membrane Bound ECD) CHO-K1 Cell Line
Mouse_CD3 HEK-293 Cell Line	
Anti-CD3E×BCMA hIgG4 Reference Antibody (Tecbio)	Anti-CD3 epsilon hIgG1 Antibody [OKT-3 (muromonab)]
Anti-CD3 hIgG1 Antibody(CH2527)	Anti-CD3×CD20 hIgG1 Bispecific Antibody (Epcobio)
Anti-mouse CD3ε mIgG2a Antibody(145-2C11)	
FGFR2	
Cynomolgus_FGFR2b HEK-293 Cell Line	H_FGFR2b CHO-K1 Cell Line
H_FGFR2b HEK-293 Cell Line	Mouse_FGFR2b HEK-293 Cell Line
Anti-FGFR2 hIgG1 Antibody(hFR2-14_H12-L1)	Anti-FGFR2 hIgG1 Referece Antibody (Bemabio)
Cynomolgus FGFR2(IIIb) D1-D3 Protein; His Tag	Human FGFR2(IIIb) D1-D3 Protein; hFc Tag
Human FGFR2(IIIb) D2-D3 Protein; hFc Tag	Human FGFR2(IIIb) D2-D3 Protein; His Tag
Human FGFR2(IIIc) D1-D3 Protein; His Tag	Mouse FGFR2(IIIb) D2-D3 Protein; His Tag
CLDN3	
H_CLDN3 HEK-293 Cell Line	
Anti-CLDN3 hIgG1 Antibody(H4G3)	
CLDN4	
H_CLDN4 HEK-293 Cell Line	
Anti-CLDN4 hIgG1 Antibody(4B8)	
CLDN6	
Cynomolgus_CLDN6 CHO-K1 Cell Line	H_CLDN6 CHO-K1 Cell Line
H_CLDN6 HEK-293 Cell Line	H_CLDN6 LLC1 Cell Line
H_CLDN6 MC38 Cell Line	Mouse_CLDN6 CHO-K1 Cell Line
Rat_CLDN6 CHO-K1 Cell Line	Rhesus_CLDN6 CHO-K1 Cell Line
Anti-Claudin6 hIgG1 Reference Antibody	Anti-CLDN6/9 hIgG1 Antibody
CLDN9	
H_CLDN9 CHO-K1 Cell Line	H_CLDN9-eGFP HEK-293 Cell Line
CLDN1	
Cynomolgus_CLDN1 CHO-K1 Cell Line	H_CLDN1 CHO-K1 Cell Line
H_CLDN1 HCT116 Cell Line	Mouse_CLDN1-GFP CHO-K1 Cell Line
Anti-CLDN1 hIgG1 Reference Antibody (Lixubio)	
CD44	
H_CD44v6 CHO-K1 Cell Line	H_CD44v6 HEK-293 Cell Line
Anti-CD44v6 hIgG1 Antibody(bivatuzumab)	
ADC Related Product	
Anti-DXD Mouse IgG1 Antibody (23E21C5)	Anti-DXD Mouse IgG1 Antibody (4A5A12)
Anti-Dxd Mouse IgG2a Antibody (17D6A4)	Anti-Eribulin Mouse IgG2a Antibody (10F8G4)
Anti-MMAE Mouse IgG1 Antibody (11C10E3)	Anti-MMAE Mouse IgG2a Antibody (17A1K11)

Anti-MMAE Mouse IgG2a Antibody (8F6A3)	Anti-SN38 Mouse IgG1 Antibody(59H11C7)
Mouse anti Human IgG1-DXD(Dar8)	Mouse anti Human IgG1-MMAE(Dar4)
Human IgG1 Isotype-DXD (Dar8)	Human IgG1 Isotype-Eribulin (Dar4)
Human IgG1 Isotype-MMAE (Dar4)	
Recombinant DT3C Protein	

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