

Product Sheet

H_CLDN18.2 MKN45 Cell Line(Medium Expression)

Catalog number: GM-C29754

Version 3.3.1.241120

| | |
|------------------------------|--|
| Description | H_CLDN18.2 MKN45 Cell Line(Medium 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. |

Materials

| Reagent | Manufacturer/Catalogue No. |
|------------------------------|-----------------------------|
| RPMI 1640 | VivaCell/C3010-0500 |
| Fetal Bovine Serum | Cegrogen biotech/A0500-3010 |
| Pen/Strep | Thermo/15140-122 |
| Puromycin | Genomeditech/GM-040401 |
| Anti-CLDN18.2 hIgG1 Antibody | In house |

Figures

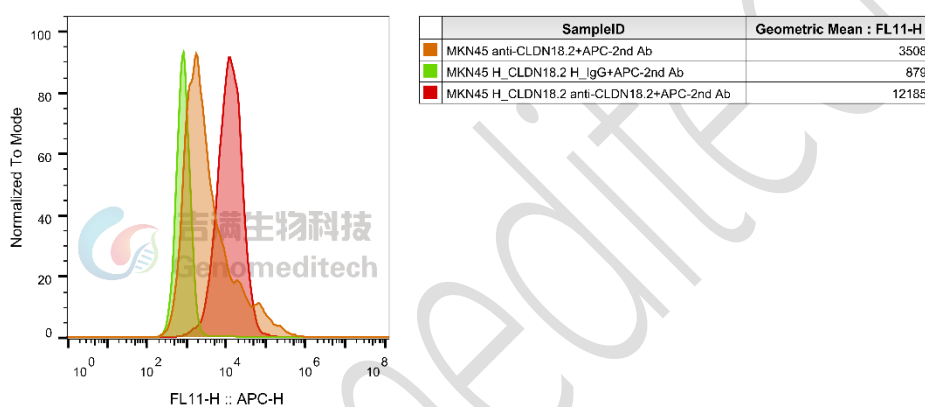


Figure 1 | H_CLDN18.2 MKN45 Cell Line(Medium Expression) (Cat. GM-C29754) was determined by flow cytometry using Anti-CLDN18.2 hIgG1 Antibody (In house).

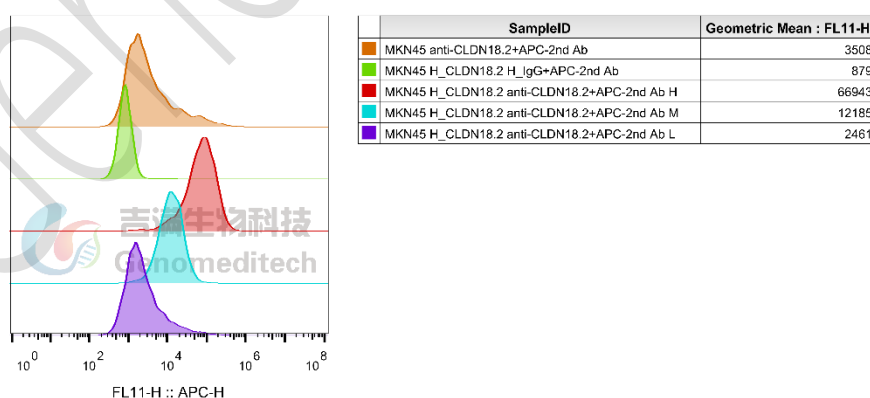


Figure 2 | H_CLDN18.2 MKN45 Cell Line(High Expression) (Cat. GM-C29870), H_CLDN18.2 MKN45 Cell Line(Medium Expression) (Cat. GM-C29754) and H_CLDN18.2 MKN45 Cell Line(Low Expression) (Cat. GM-C29874) were determined by flow cytometry using Anti-CLDN18.2 hIgG1 Antibody (In house).

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 $176 \times g$ 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 $176 \times g$ for 3 minutes to collect cells.
- b) Resuspend the cells in pre-cooled freezing medium and adjust the cell density to 5×10^6 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 $\mu\text{g}/\text{mL}$ 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

- Under normal conditions, these cells exist as both adherent and round suspension cells.
- When changing the medium, take care to retain the suspension cells. During passaging, collect both the adherent and suspension cells together before subculturing.
- 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) [NP_001002026.1](#)

MAVTACQGLGFVVSILIGIAGIIAATCMDQWSTQDLNPNVTVAFNYYQGLWRSCVRESSGFTECRGYFTLLGL
 PAMLQAVRALMIVGIVLGAIGLLVSIFALKCIRIGSMEDSAKANMTLTSGIMFIVSGLCAIAGVSVFANMLVTN
 FWMSTANMYTGMGMVQTVQTRYTFGAALFVGWVAGGLTLIGGVMMCIACRGLAPEETNYKAVSYHAS
 GHSVAYKPGGFKASTGFGSNTKNKKIYDGGARTEDEVQSYPSKHDYVGSYDKDHDGDYKDHDIDYKDDDD
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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 | H_CLDN18.2 MKN45 Cell Line(High Expression) |
| H_CLDN18.2 MKN45 Cell Line(Low 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 Antibody(LM-102) | Anti-CLDN18.2 hIgG1 Antibody(Zolbetuximab) |
| HER3(ERBB3) | |
| Cynomolgus_ERBB3(HER3) CHO-K1 Cell Line | Cynomolgus_ERBB3(HER3) HEK-293 Cell Line |
| H_ERBB3(HER3) CHO-K1 Cell Line | H_ERBB3(HER3) HEK-293 Cell Line |
| H_ERBB3(HER3) MC38 Cell Line | Mouse_ERBB3(HER3) CHO-K1 Cell Line |
| Anti-ERBB3(HER3) hIgG1 Reference Antibody(Patibio) | Anti-H_ERBB3(HER3) hIgG1 Antibody(Barecetamab) |
| Human HER3 Protein; His Tag | |
| 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 | |

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|---|--|
| 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 deruxtecán,Dato-DXD] | Anti-Trop2-SN38 ADC(Dar8)[Sacituzumab govitecan] |
| Human TROP2 Protein; His Tag | |
| GUCY2C(GC-C) | |
| H_GUCY2C CHO-K1 Cell Line | H_GUCY2C HEK-293 Cell Line |
| Anti-H_GUCY2C hIgG1 Antibody(Indusatumab) | |
| CD3 | |
| 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_CD3E(Membrane Bound ECD) CHO-K1 Cell Line |
| Mouse_CD3 HEK-293 Cell Line | |
| Anti-CD3 epsilon hIgG1 Antibody [OKT-3 (muromonab)] | Anti-CD3 hIgG1 Antibody(CH2527) |
| 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 |
| 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 | |
| Cynomolgus_CLDN9 CHO-K1 Cell Line | H_CLDN9 CHO-K1 Cell Line |
| H_CLDN9-eGFP HEK-293 Cell Line | |
| 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) | Mouse anti Human IgG-MMAE(Dar4) |
| Human IgG1 Isotype-DXD (Dar8) | Human IgG1 Isotype-Eribulin (Dar4) |
| Human IgG1 Isotype-MMAE (Dar4) | |
| Recombinant DT3C Protein | |

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