

# Product Sheet

## H\_CEACAM5(CEA) CHO-K1 Cell Line

Catalog number: GM-C12814

Version 3.3.1.250731

|                              |                                                                                                                            |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b>           | H_CEACAM5(CEA) CHO-K1 Cell Line is a clonal stable CHO-K1 cell line constitutively expressing human CEACAM5(CEA).          |
| <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_CEACAM5(CEA)                                                                                                         |
| <b>Gene ID/Uniprot ID</b>    | P06731-1                                                                                                                   |
| <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 Blasticidin+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.               |
|--------------------------------------|------------------------------------------|
| F12K                                 | BOSTER/PYG0036                           |
| Fetal Bovine Serum                   | ExCell/FSP500                            |
| Pen/Strep                            | Thermo/15140-122                         |
| Puromycin                            | Genomeditech/ <a href="#">GM-040401</a>  |
| Blasticidin                          | Genomeditech/ <a href="#">GM-040404</a>  |
| Anti-CEA hIgG1 Antibody(Cibisatamab) | Genomeditech/ <a href="#">GM-28531AB</a> |

## Figures

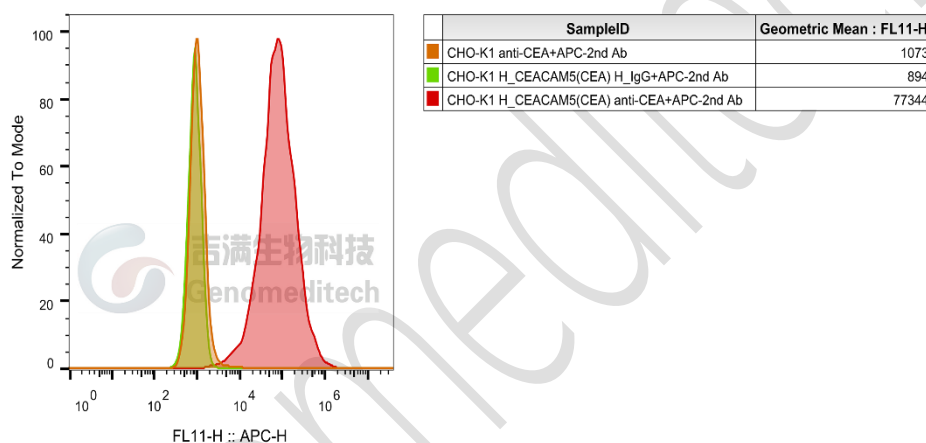


Figure 1 | H\_CEACAM5(CEA) CHO-K1 Cell Line (Cat. GM-C12814) was determined by flow cytometry using Anti-CEA hIgG1 Antibody (Cat. [GM-28531AB](#)).

## 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.

- 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<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

- 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: F12K+10% FBS+1% P.S+4 µg/mL Blasticidin+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

CEACAM5(CEA) P06731-1

MESPSAPPHRWQIPWQRLLLTASLLTFWNPPTAKLTIESTPFNVAEGKEVLLL VHNLPQHLFGYSWYKGER  
VDG NRQIIIGYVIGTQQATPGPAYSGREIIPNASLLIQNIQNDTGFTLHVIKSDLVNEEATGQFRVYPELPKP  
SISSNNSKPVEDKDAVAFTCEPETQDATYLLWWVNNQSLPVSPRLQLSNGNRTLTLFNVTRNDTASYKCETQN

PVSARRSDSVILNVLYGPDAPTISPLNTSYRSGENLNLSCHAASNPPAQYSWFVNGTFQQSTQELFIPNITVNN  
SGSYTCQAHNSDTGLNRRTTVTTITVYAEPPKPFITSNNSNPVEDEDAVALTCEPEIQNTTYLWWVNNQSLPVS  
PRLQLSNDNRTLTLLSVTRNDVGPYECGIQNELSVDHSDPVILNVLYGPDDPTISPSYTYRPGVNLSSLCHAA  
SNPPAQYSWLIDGNIQHTQELFISNITEKNSGLYTCQANNSASGHSRTTVKTITVSAELPKPSISSNNSKPVED  
KDAVAFTCEPEAQNTTYLWWVNGQSLPVSPRLQLSNGNRRTLTLFNVTRNDARAYVCGIQNSVSANRSDPVT  
LDVL YGPDPTIISPDPSSYLSGANLNLSCHSASNPSPQYSWRINGIPQHTQVLFIAKITPNNGTYACFVSNLA  
TGRNNSIVKSITVSASGTSPGLSAGATVGIMIGVLVGVALI\*

## Related Products

| HAVCR2(TIM3): CEACAM1                             |                                                      |
|---------------------------------------------------|------------------------------------------------------|
| Cynomolgus_HAVCR2(TIM3) CHO-K1 Cell Line          | H_CEACAM1(CD66a) CHO-K1 Cell Line                    |
| H_HAVCR2(TIM3) CHO-K1 Cell Line                   | H_HAVCR2(TIM3) HEK-293 Cell Line                     |
| Anti-H_CEACAM1(CD66a) hIgG4 Antibody(MK-6018)     | Anti-H_HAVCR2(TIM3) hIgG4 Antibody(Sabatolimab)      |
| Anti-TIM3 hIgG2 Antibody(M6903)                   |                                                      |
| CEACAM5                                           |                                                      |
| Cynomolgus_CEACAM5(CEA) CHO-K1 Cell Line          | Cynomolgus_CEACAM5(CEA) HEK-293 Cell Line            |
| H_CEACAM5(CEA) CT26 Cell Line                     | H_CEACAM5(CEA) HEK-293 Cell Line                     |
| H_CEACAM5(CEA) MC38 Cell Line                     |                                                      |
| Anti-CEA hIgG1 Antibody(Cibisatamab)              | Anti-CEACAM5 hIgG1 Reference Antibody(Labbio)        |
| Anti-CEACAM5 hIgG1 Reference Antibody(Tusbio)     |                                                      |
| Human CEACAM5 Protein; His Tag                    |                                                      |
| CEACAM6                                           |                                                      |
| Cynomolgus_CEACAM6(CD66c) CHO-K1 Cell Line        | H_CEACAM6(CD66c) CHO-K1 Cell Line                    |
| H_CEACAM6(CD66c) HEK-293 Cell Line                | H_CEACAM6(CD66c) HEK-293 Cell Line (High Expression) |
| Anti-H_CEACAM6(CD66c) hIgG1 Antibody(Tinurilimab) |                                                      |
| CEACAM7                                           |                                                      |
| Cynomolgus_CEACAM7 CHO-K1 Cell Line               | H_CEACAM7 CHO-K1 Cell Line                           |
| H_CEACAM7 HEK-293 Cell Line                       |                                                      |
| Anti-CEACAM7 hIgG4 Antibody(2869)                 |                                                      |
| 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 IgG1-MMAE(Dar4)                     |
| Human IgG1 Isotype-DXD (Dar8)                     | Human IgG1 Isotype-Eribulin (Dar4)                   |
| Human IgG1 Isotype-MMAE (Dar4)                    |                                                      |
| Recombinant DT3C Protein                          |                                                      |

## 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.

Genomeditech