

Product Sheet

H_LGR5 CHO-K1 Cell Line

Catalog number: GM-C22690

Version 3.3.1.260622

Description	H_LGR5 CHO-K1 Cell Line is a clonal stable CHO-K1 cell line that constitutively expresses the human LGR5 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_LGR5
Gene ID/Uniprot ID	O75473-1
Host Cell	CHO-K1
Recovery Medium	F12K+10% FBS+1% P.S
Growth medium	F12K+10% FBS+1% P.S+4 µg/mL Puromycin
Note	None
Freezing Medium	90% FBS+10% DMSO
Growth properties	Adherent
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.
F12K	BOSTER/PYG0036
Fetal Bovine Serum	ExCell/FSP500
Pen/Strep	Thermo/15140-122
Puromycin	Genomeditech/GM-040401
APC Rabbit anti-Human LGR5/GPR49 mAb	ABclonal/A26864

Figures

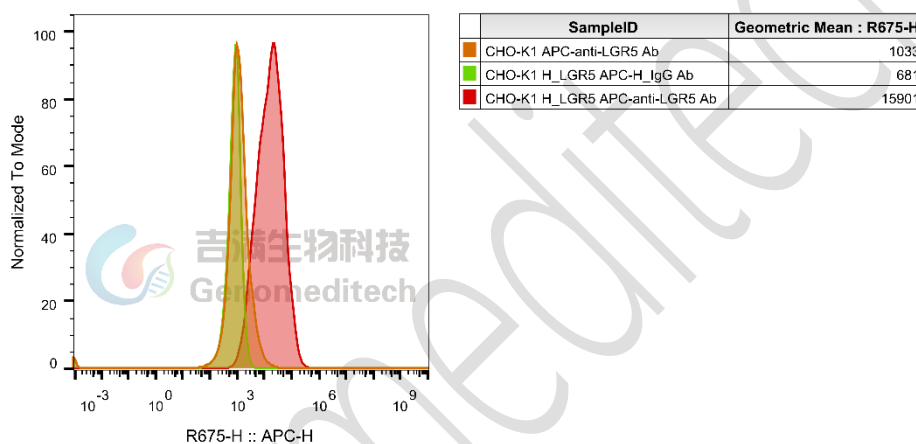


Figure 1 | H_LGR5 CHO-K1 Cell Line (Cat. GM-C22690) was determined by flow cytometry using APC Rabbit anti-Human LGR5/GPR49 mAb (ABclonal/A26864).

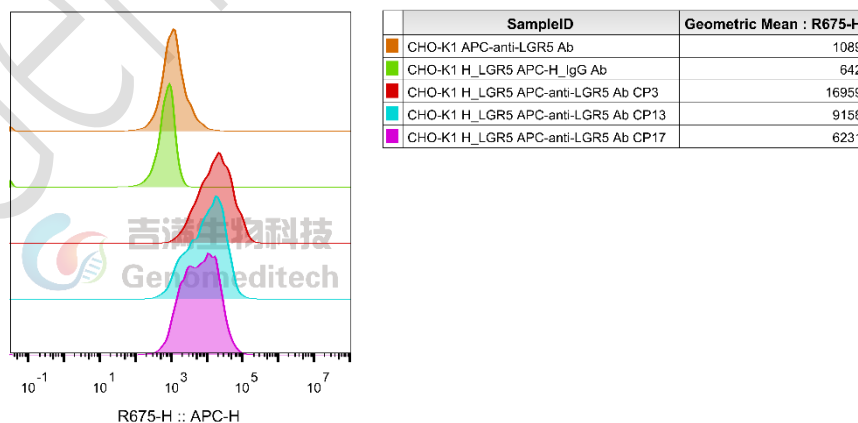


Figure 2 | The passage stability of the H_LGR5 CHO-K1 Cell Line (Cat. GM-C22690) was determined by flow cytometry using APC Rabbit anti-Human LGR5/GPR49 mAb (ABclonal/A26864). High passage H_LGR5 CHO-K1 Cell Line may demonstrate diminished signaling capabilities during culture, a phenomenon intricately linked to cellular

senescence, alterations in gene expression, and reduced intercellular interactions. Consequently, it is advisable to prioritize the use of low passage cells to preserve the integrity of their biological characteristics and functions, thereby enhancing the reliability and reproducibility of experimental outcomes.

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.

- 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: F12K+10% FBS+1% P.S+4 $\mu\text{g/mL}$ 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

LGR5 [O75473-1](#)

MDTSRLGVLLSLPVLLQLATGGSSPRSGVLLRGCPHCHCEPDGRMLLRVDCSDLGLSELPSNLSVFTSYLDL
SMNNISQLLPNPLPSLRFLEELRLAGNALTYIPKGAFTGLYSLKVLMLQNNQLRHVPTEALQNLRSLSLRD
ANHISYVPPSCFSGLHSLRHLWDDNALTEIPVQAFRSLALQAMTLALNKIHHIPDYAFGNLSSLVVLHLHN
NRIHSLGKKCFDGLHSLETLDLNYNNLDEFPTAIRTLNLKELGFHSNNIRSIPEKAFVGNPSLTIHFYDNPIQF
VGRSAFQHLPELRTLTLNGASQITEFPDLTGTANLESLTLTGAQISSLPQTVCNQLPNLQVLDLSYNLLEDLPF
SVCQKLQKIDLRHNEIYEIKVDTFQQLSLRSLNLAWNKIAIHPNAFSTLPSLIKLDLSSNLLSSFPITGLHGLT
HLKLTGNHALQSLISSENFPELKVIEMPYAYQCCAFGVCENAYKISNQWNGDNSSMDDLHKKDAGMFQAQ
DERDLEDFLDFEEDLKALHSVQCSPSPGPFKCEHLLDGWLIRIGVWTIAVLALTCNALVTSTVFRSPYISPI
KLLIGVIAAVNMLTGVSVAVLAVLAGVDAFTFGSFARHGAWWENGVGCHVIGFLSIFASESSVLLTLAALERGF
VKYSAKFETKAPFSSLKVIILLCALLALTMAAVPLGGSKYGASPLCLPLPFGEPTMGYMAVALILLNSLCFLM
MTIAYTKLYCNLDKGDLENIWDCSMVKHIALLLFTNCILNCPVAFLSFSSLINLTFISPEVIKIFILLVVVPLPACL
NPLLYILFNPHFKEDLVSLRKQTYVWTRSKHPSLMSINSDDVEKQSCDSTQALVTFTSSSITYDLPPSSVPSPAY
PVTESCHLSSVAFVPC

Related Products

LGR5	
Cynomolgus_LGR5 HEK-293 Cell Line	H_LGR5 HEK-293 Cell Line
Mouse_LGR5 CHO-K1 Cell Line	Mouse_LGR5 HEK-293 Cell Line
Rhesus_LGR5 CHO-K1 Cell Line	
Anti-H_LGR5 hIgG1 Antibody(18G7H6A3)	

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