Genomeditech (Shanghai) Co.,Ltd.
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Product Sheet

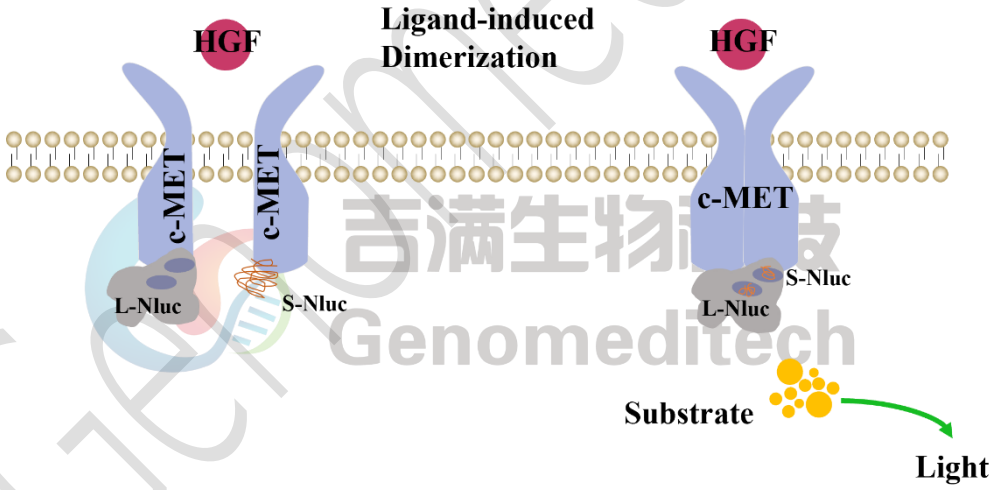
H_cMET: cMET Dimerization U2OS Cell Line

Catalog number: GM-C38145

Version 3.3.1.250228

cMET protein (also known as MET or HGF receptor) is a tyrosine kinase receptor composed of an extracellular ligand-binding domain, a transmembrane domain, and an intracellular tyrosine kinase domain. Its primary ligand is hepatocyte growth factor (HGF), secreted by liver cells. cMET promotes cell proliferation by binding to HGF and plays a role in tissue growth and repair. cMET is actively involved in various biological processes, including cell proliferation, migration, survival, and morphogenesis.

H_cMET: cMET Dimerization U2OS Cell Line is a clonal stable U2OS cell line constructed using lentiviral technology, constitutive expression of the cMET chimeric receptor gene， and detected using enzyme fragment complementation (EFC) technology. This technique uses an agonist to trigger receptor dimerization, enabling two luciferase fragments to complement each other and form an active complex. Upon addition of a luciferase substrate, the complex catalyzes the reaction to produce a detectable luminescent signal. This highly sensitive method enables real-time monitoring of receptor interactions as well as functional changes in the cellular environment, making it a powerful tool for drug screening and biological research.



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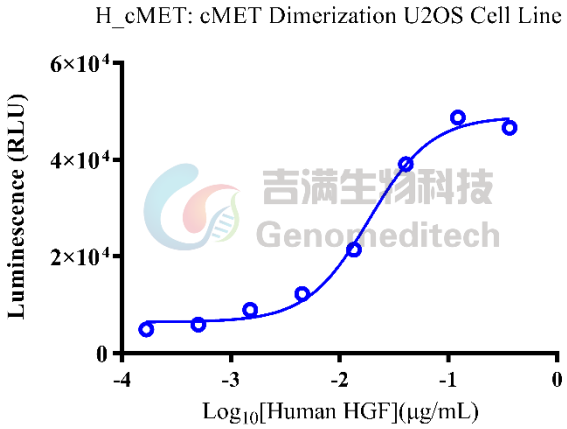
Specifications

Quantity	4E6 Cells per vial,1 mL
Product Format	1 vial of frozen cells
Shipping	Shipped on dry ice
Storage Conditions	Liquid nitrogen immediately upon receipt
Recovery Medium	McCoy's 5A+10% FBS+1% P.S
Growth medium	McCoy's 5A+10% FBS+1% P.S+0.5 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

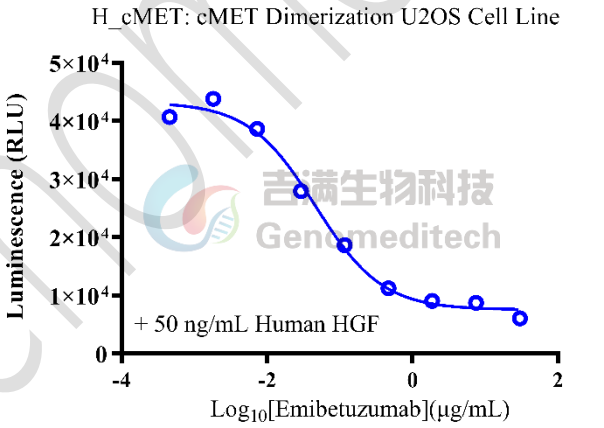
Reagent	Manufacturer/Catalogue No.
McCoy's 5A	VivaCell/C3020-0500
Fetal Bovine Serum	Cegrogen biotech/A0500-3010
Pen/Strep	Thermo/15140-122
Puromycin	Genomeditech/GM-040401
Recombinant Human HGF (C-6His)	Novoprotein/CJ72
Anti-H_HGFR(Met) hIgG4 Antibody(Emibetuzumab)	Genomeditech/GM-28859AB

Figures



	H_cMET: cMET Dimerization U2OS
EC50	0.01876

Figure 1 | Response to Recombinant Human HGF. H_cMET: cMET Dimerization U2OS Cell Line (Cat. GM-C38145) at a concentration of 1.5E4 cells/well (96-well format) was stimulated with serial dilutions of Recombinant Human HGF (Novoprotein/CJ72) in assay buffer (McCoy's 5A+1% FBS+1% P.S) for 6 hours. The firefly luciferase activity was measured using a detection kit. The maximum induction fold was approximately [12.0]. Data are shown by drug mass concentration.



	H_cMET: cMET Dimerization U2OS
IC50	0.04641

Figure 2 | Response to Anti-H_HGFR(Met) hIgG4 Antibody(Emibetuzumab). Serial dilutions of the Anti-H_HGFR(Met) hIgG4 Antibody(Emibetuzumab) (Cat. GM-28859AB) was incubated with 1.5E4 cells/well of the H_cMET: cMET Dimerization U2OS Cell Line (Cat. GM-C38145) in a 96-well plate for 1 hour in assay buffer (McCoy's 5A+1% FBS+1% P.S). Subsequently, the Recombinant Human HGF (Novoprotein/CJ72) at a concentration of 5 ng/well was added, and the coculture proceeded for an additional 6 hours. The firefly luciferase activity was measured using a detection kit. The results indicated maximum blocking folds of approximately [7.4]. Data are shown by drug mass concentration.

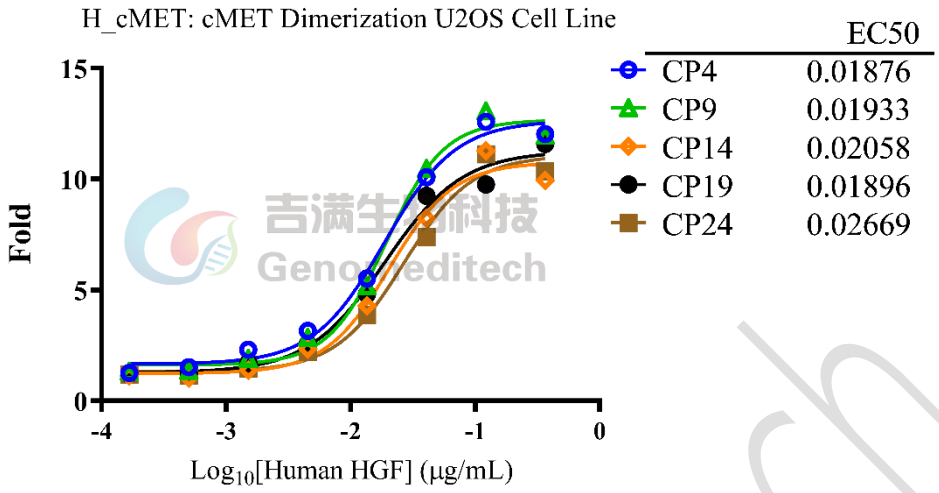
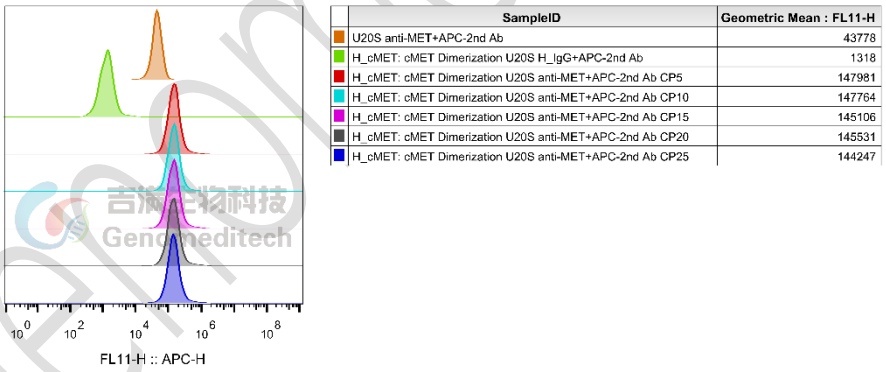


Figure 3 | The passage stability of response to Recombinant Human HGF. The passage 4, 9, 14, 19, and 24 of H_cMET: cMET Dimerization U2OS Cell Line (Cat. GM-C38145) at a concentration of 1.5E4 cells/well (96-well format) were stimulated with serial dilutions of Recombinant Human HGF (Novoprotein/CJ72) in assay buffer (McCoy's 5A+1% FBS+1% P.S) for 6 hours. The firefly luciferase activity was measured using a detection kit. Data are shown by drug mass concentration.



SampleID	Geometric Mean : FL11-H
U20S anti-MET+APC-2nd Ab	43778
H_cMET: cMET Dimerization U20S H_IgG+APC-2nd Ab	1318
H_cMET: cMET Dimerization U20S anti-MET+APC-2nd Ab CP5	147981
H_cMET: cMET Dimerization U20S anti-MET+APC-2nd Ab CP10	147764
H_cMET: cMET Dimerization U20S anti-MET+APC-2nd Ab CP15	145106
H_cMET: cMET Dimerization U20S anti-MET+APC-2nd Ab CP20	145531
H_cMET: cMET Dimerization U20S anti-MET+APC-2nd Ab CP25	144247

Figure 4 | The passage stability of the H_cMET: cMET Dimerization U2OS Cell Line (Cat. GM-C38145) was determined by flow cytometry using Anti-H_HGFR(Met) hIgG4 Antibody(Emibetuzumab) (Cat. GM-28859AB).

Cell Recovery

Recovery Medium: McCoy's 5A+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.

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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 4E6 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: McCoy's 5A+10% FBS+1% P.S+0.5 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 1:3 - 1:4 is recommended

Medium Renewal: Every 2 to 3 days

Notes

a) It is normal to observe a higher number of dead cells immediately after thawing. The condition will improve significantly after adjustment. Once the cells stabilize, the number of dead cells will decrease after subculturing, and the cell growth rate will become stable.

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Related Products

C-MET:HGF	
Cynomolgus_cMET CHO-K1 Cell Line	H_cMET CHO-K1 Cell Line
H_cMET HEK-293 Cell Line	
Anti-H_HGFR(Met) hIgG4 Antibody(Emibetuzumab)	

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