

UM-HMC-1 | 305716

Product information

Description	UM-HMC-1 is a human umbilical vein endothelial cell line derived from a 76-year-old female patient with atherosclerosis. The cells are characterized by their ability to form a confluent monolayer and are used for studying endothelial dysfunction and the effects of various treatments on endothelial cells. The cells are maintained in a medium containing 10% fetal bovine serum (FBS) and 1% penicillin-streptomycin. The cells are characterized by their ability to form a confluent monolayer and are used for studying endothelial dysfunction and the effects of various treatments on endothelial cells. The cells are maintained in a medium containing 10% fetal bovine serum (FBS) and 1% penicillin-streptomycin.
Organism	Human
Tissue	Endothelial cells
Disease	Atherosclerosis
Metastatic site	None
Applications	Study of endothelial dysfunction, study of the effects of various treatments on endothelial cells, study of the effects of various treatments on endothelial cells.
Synonyms	UM-HMC-1, Human Umbilical Vein Endothelial Cell Line

Cell characteristics

Age	76 years
Gender	Female
Ethnicity	White
Morphology	Endothelial cells
Cell type	Endothelial cells
Growth properties	Adherent

Additional information

Citation	UM-HMC-1 (Cytion: 305716)
Biosafety level	1

Product sheet

XXXXXXXXUM-HMC-1 | 305716

NCBI_TaxID 9606

CellosaurusAccession CVCL_Y473

XXXXXXXXXX XXXXXXXXXXXX XXXXXXXXXXXX

Mutational profile XXXXXXX: XXXXXXX XXXXXXXXXXXX CRTC1 + HGNC MAML2 XXXXXXX (XXXXXXXX) = CRTC1-MAML2 MECT1-MAML2.

XXXXXXXXXX

Culture Medium DMEM: DMEM:Ham's F12 (1:1) 3.1 µg/ml XXXXXXXXXXX 2.5 µg/ml XXXXXXX XXXXXXXXXXX 15 µg/ml XXXXXXX XXXXXXX (15 µg/ml XXXXXXX XXXXXXX)

Supplements µg/ml XXXXXXX 10% FBS

Dissociation Reagent XXXXXXX 20 XXXXXXX 37 XXXXXXX XXXXXXX

Doubling time XXXXXXX 24 XXXXXXX 48 XXXXXXX

Subculturing XXXXXXX XXXXXXX XXXXXXX PBS XXXXXXX XXX Accutase XXXXXXX XXXXXXX XXX 8-1

Split ratio 1:5

Seeding density 1-3 x 10⁴ cells/cm²

Fluid renewal XXXXXXX XXXXXXX 3 XXXXXXX

Freeze medium XXXXXXX XXXXXXX XXX (10% FBS) + 10% DMSO XXXXXXX XXXXXXX XXX

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Thawing and
Culturing Cells

1. Thaw the cells as quickly as possible in a water bath at 37 °C. Remove the cells from the bath and centrifuge at 300 × g for 3 min. Remove the supernatant and resuspend the cells in 1 ml of complete medium. Seed the cells into a 25 cm² flask containing 10 ml of complete medium.
2. Incubate the cells in a humidified atmosphere of 5% CO₂ at 37 °C. The cells should reach a confluency of approximately 70% within 7-10 days.
3. Once the cells have reached confluency, they can be passaged. Remove the medium and wash the cells with PBS. Detach the cells using trypsin-EDTA. Count the cells and seed them into a new flask.
4. The cells should be maintained in complete medium. Change the medium every 3-4 days. If the cells are not growing, check the medium and the conditions.
5. For long-term storage, harvest the cells and resuspend them in freezing medium. Seed the cells into a cryovial and store at -150 °C to -196 °C.
6. To thaw the cells, place the cryovial in a water bath at 37 °C. Remove the cells and centrifuge at 300 × g for 3 min. Resuspend the cells in complete medium and seed them into a flask.
7. The cells should reach a confluency of approximately 70% within 7-10 days.
8. Once the cells have reached confluency, they can be passaged. Remove the medium and wash the cells with PBS. Detach the cells using trypsin-EDTA. Count the cells and seed them into a new flask.

Incubation
Atmosphere

37 °C, 5% CO₂, humidified

Flask Coating

Not required

Shipping
Conditions

Cells are shipped in a dry ice container at -78 °C.

Storage
Conditions

Cells can be stored at -150 °C to -196 °C for up to 1 year.

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Sterility

The cells are certified to be free of mycoplasmas and endotoxins. The cells are also free of viruses and other pathogens. The cells are tested using PCR and other methods.