HMEC-1

304064

GENERAL INFORMATION

Description

[illegible] HMEC-1 [illegible] Human Microvascular Endothelial Cells-1 [illegible] HMEC-1 [illegible]

[illegible] HMEC-1 [illegible] CD31 (PECAM-1), [illegible] von Willebrand [illegible] VE-cadherin [illegible] (angiogenesis) [illegible]

[illegible], [illegible], [illegible] HMEC-1 [illegible]

[illegible] HMEC-1 [illegible]

Tissue	[illegible]

Applications

[illegible]

Synonyms

- Hmec-1
- HMEC1
- CDC/EU.HMEC-1
- Human Microvascular Endothelial Cell line-1

CLASSIFICATION

Organism	Human
Sex	Male
Growth properties	Adherent
GMO status	GMO-S1

GMO status details

GMO-S1: This human microvascular endothelial cell line (HMEC-1) contains an SV40 T-Antigen construct delivered via the pSVT vector, enabling robust proliferation and immortalization. The construct is stably integrated into endothelial cells. This classification applies only within Germany and may differ elsewhere.

Biosafety level	1

CHARACTERISTICS

Morphology	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□

IDENTIFIERS

Citation

HMEC-1 (□□□□□□□□□□□□□□□□□□ Cytion 304064)

NCBI TaxID	9606
Cellosaurus	[CVCL_0307]

EXPRESSION AND SUSCEPTIBILITY

Protein expression

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Viruses

□□□□□□□□□□□□□□ 40 (□□□□□□□□□□ T □□□□□□□□□□)

HANDLING AND CULTURE

Culture medium

Alpha MEM, w: □□□□□□□□□□□□□□□□ 2.0 □□□□□□□□□□□□□, w/o: □□□□□□□□□□□□□□□□□□□, w/o: □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□, w: □□□□□□□□□□□□□□□□ 1.0 □□□□□□□□□□□□□, w: $NaHCO_3$ 2.2 □□□□/□□□□

Incubation atmosphere	37°C, 5%CO_2, □□□□□□□□□□□□□□

Supplements

□□ FBS 10%, Epidermal Growth Factor 10 □□□□□□□□□□/□□□□□□□□□□□, Hydrocortisone 1 □□□□□□□□□□□/□□□□□□□□□□□, Glutamine 10 □□□□□□□□□□□□□

Dissociation reagent	□□□□□□□□□

Subculturing

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Thawing and culturing

Confirm that the vial remains deeply frozen upon delivery, as cells are shipped on dry ice to maintain optimal temperatures during transit.
Upon receipt, either store the cryovial immediately at temperatures below -150°C to ensure the preservation of cellular integrity, or proceed to step 3 if immediate culturing is required.
For immediate culturing, swiftly thaw the vial by immersing it in a 37°C water bath with clean water and an antimicrobial agent, agitating gently for 40-60 seconds until a small ice clump remains.
Perform all subsequent steps under sterile conditions in a flow hood, disinfecting the cryovial with 70% ethanol before opening.
Carefully open the disinfected vial and transfer the cell suspension into a 15 ml centrifuge tube containing 8 ml of room-temperature culture medium, mixing gently.
Centrifuge the mixture at 300 x g for 3 minutes to separate the cells and carefully discard the supernatant containing residual freezing medium.
Gently resuspend the cell pellet in 10 ml of fresh culture medium. For adherent cells, divide the suspension between two T25 culture flasks; for suspension cultures, transfer all the medium into one T25 flask to promote effective cell interaction and growth.
Adhere to established subculture protocols for continued growth and maintenance of the cell line, ensuring reliable experimental outcomes.

QUALITY CONTROL AND CRYOPRESERVATION

Sterility

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Freeze medium	□□ □□ (□□□□□□□ FBS) + 10% DMSO □□ □□□□ CM-1 (□□□□□□□□ □□□□□□□□□□ Cytion 800100) □□

Storage conditions

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Shipping conditions

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DONOR

Donor age	1 □□□□□

LEGAL AND SAFETY

Safety precautions

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Warranty

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Material Transfer Agreement required	Yes