

Materials List for

Monitoring Changes in Human Umbilical Vein Endothelial Cells upon Viral Infection Using Impedance-Based Real-Time Cell Analysis

Jo-Ern Wong¹, Nurhafiza Zainal², Sazaly AbuBakar¹, Kim-Kee Tan¹

¹Tropical Infectious Diseases Research and Education Centre (TIDREC), Higher Institution Center of Excellence (HiCoE), Universiti Malaya ²Department of Medical Microbiology, Faculty of Medicine, Universiti Malaya

Corresponding Author

Kim-Kee Tan

kimkee@um.edu.my

Citation

Wong, J.E., Zainal, N., AbuBakar, S., Tan, K.K. Monitoring Changes in Human Umbilical Vein Endothelial Cells upon Viral Infection Using Impedance-Based Real-Time Cell Analysis. *J. Vis. Exp.* (195), e64887, doi:10.3791/64887 (2023).

Date Published

May 5, 2023

DOI

10.3791/64887

URL

jove.com/video/64887

Materials

Name	Company	Catalog Number	Comments
1.5 mL microcentrifuge tube	Nest	615601	
37 °C incubator with 5% CO ₂	Sanyo	MCO-18AIC	
75 cm ² tissue culture flask	Corning	430725U	
Antibiotic solution penicillin-streptomycin (P/S)	ScienCell	0503	
Biological safety cabinet, Class II	Holten	HB2448	
Collagen Type 1	Sigma-Aldrich	C3867	
Endothelial cell growth supplement (ECGS)	ScienCell	1052	
Endothelial cell medium (ECM)	ScienCell	1001	
E-plate 96	Agilent Technologies, Inc.	05232368001	
Fetal bovine serum (FBS)	ScienCell	0025	
Hanks' Balanced Salt Solution (HBSS)	Sigma-Aldrich	H9394	
Hemocytometer	Laboroptik LTD	Neubauer improved	
Human Umbilical Vein Endothelial Cells (HUVECs)	ScienCell	8000	
Inverted microscope	ZEISS	TELAVAL 31	
Latitude 3520 Laptop	Dell	-	
Multichannel micropipette (10 - 100 µL)	Eppendorf	3125000036	
Multichannel micropipette (30 - 300 µL)	Eppendorf	3125000052	
Reagent reservoir	Tarsons	T38-524090	
RTCA resistor plate 96	Agilent Technologies, Inc.	05232350001	
RTCA Software Pro (Version 2.6.1)	Agilent Technologies, Inc.	5454433001	
Single channel pipettes (10 - 100 µL)	Eppendorf	3123000047	

Single channel pipettes (100 - 1000 μ L)	Eppendorf	3123000063	
Single channel pipettes (20 - 200 μ L)	Eppendorf	3123000055	
xCELLigence Real-time cell analyzer SP (Model: W380)	Agilent Technologies, Inc.	00380601030	https://www.agilent.com/en/product/cell-analysis/real-time-cell-analysis/rtca-analyzers/xcelligence-rtca-sp-single-plate-741232