

An Innovative 3D-Printed Insert Designed to Enable Straightforward 2D and 3D Cell Cultures

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Materials

Name	Company	Catalog Number	Comments
Autoclave	Getinge	APHP	Solid cycle, 121 °C for 20 min
Biomed Clear	Formlabs	RS-F2-BMCL-01	Impression performed by 3D-Morphoz company (Reims, France)
Cell culture detergents	Touneff	A18590/0116	
Cell Proliferation Reagent WST-1	Roche	11,64,48,07,001	
Counting slide	NanoEnTek	EVE-050	
Culture-Insert 2 Well in μ -Dish 35 mm	Ibidi	80206	two-migration chambers device.
Endothelial cell medium	ScienCell	1001	Basal medium +/- 25 mL of fetal bovine serum (FBS, 0025), 5 mL of endothelial cell growth supplement (ECGS, 1052), and 5 mL of penicillin/streptomycin solution (P/S, 0503).
EVE Automated cell counter	NanoEnTek	NESCT-EVE-001E	
EVOS XL Core	Fisher Scientific	AMEX1200	10x of magnification
Food silicon reagent and catalyst kit	Artificina	RTV 3428 A and B	(10:1)
FORM 3B printer	Formlabs	PKG-F3B-WSVC-DSP-BASIC	Impression performed by 3D-Morphoz company
Human Dermal Microvascular Endothelial Cells (HDMEC)	ScienCell	2000	
Keratinocytes of Outer Root Sheath (KORS)	ScienCell	2420	
Macro Wound Healing Tool Software	ImageJ		Software used for the measurement of the uncovered surface (for migration assays)
Mesenchymal stem cell medium	ScienCell	7501	Basal medium +/-25 mL of fetal bovine serum (FBS, 0025), 5 mL of mesenchymal stem cell growth supplement (MSCGS, 7552), and 5 mL of penicillin/streptomycin solution (P/S, 0503)

Microplate reader SPECTRO star NANO	BMG Labtech		BMG LABTECH software
PBS	Promocell	C-40232	Without Ca ²⁺ / Mg ²⁺
Trypan Blue Stain	NanoEnTek	EBT-001	
Trypsin / EDTA	Promocell	C-41020	Incubation of KORS at 37 °C with 5% CO ₂ for 5 min. Incubation of HDMECs for 5 min at room temperature
96-well plate Nunclon Delta Surface	Thermoscientific	167008	