

Materials List for:

# Bioprinting of Cartilage and Skin Tissue Analogs Utilizing a Novel Passive Mixing Unit Technique for Bioink Precellularization

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URL: <https://www.jove.com/video/56372>

DOI: [doi:10.3791/56372](https://doi.org/10.3791/56372)

## Materials

Name	Company	Catalog Number	Comments
STARTINK Kit	CELLINK	SK0001	Kit that contained all the elements for the CELLMIXER procedure
Live/Dead Kit	Life Technologies	L3224	Kit for the analysis of cell viability after mixing
Masson's Trichrome	Sigma Aldrich	HT15-1KT	Kit for the analysis of collagen I deposition in the skin constructs
Alcian Blue	Sigma Aldrich	B8438-250ML	Kit for the analysis of glycosaminoglycan deposition in the skin constructs
INKREDIBLE+ bioprinter	CELLINK	Gen1+	Printer utilized in the study
DMEM with Glutamax	Thermofisher	10566016	Media for culture of the cells
10% fetal bovine serum	Thermofisher	A3160402	Media supplement
Penicillin-Streptomycin	Life Technologies	15070063	Media supplement
live cell imaging solution	thermofisher	A14291DJ	component utilized using live/dead imaging
inverted microscope	Olympus	IX73	microscope utilized
a digital color camera	Olympus	XC10	microscope camera utilized
cellSens imaging software	Olympus	n/a	stock software with the microscope
ImageJ	NIH	n/a	open source image analysis software
GraphPad Prism 7	GraphPad	n/a	software for statistical analysis
Slic3r software (v1.2.9)	Slic3r	n/a	open-source software to convert .stl file to gcode
primary adult human dermal fibroblasts	ATCC	PCS-201-012	cell source for fibroblasts