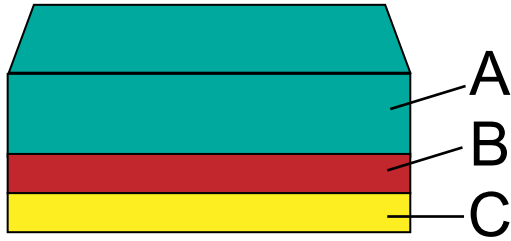


Skin Tissue Model



This sheet is a quick reference for the bioprinting of a skin model comprising three distinct architectures and cell types. The parameters and concentrations below are recommendations. See the G-code preparation protocol for a guide on how to implement these parameters and how to adjust them if necessary. Adjust of parameters by result in a different result than expected and what has been optimized by this protocol. Please consult with us if an issue arises and Happy Bioprinting!

Construct Part	A	B	C
Tissue Target	Reticular Dermis	Papillary Dermis	Epidermis
Bioink	SKIN	SKIN	SKIN
Nozzle Diameter (μm)	410	410	410
Nozzle Type	Conical	Conical	Conical
Pressure (kPa)	9	9	9
Translation Rate (mm/s)	10	10	10
Printhead #	3	2	1
Layer Height (μm)	400	400	400
Printhead Temp (C)	RT	RT	RT
Printbed Temp (C)	RT	RT	RT
Infill Pattern	Grid	Rectlinear	Rectlinear
Infill Density	20%	20%	80%
Cell Type	HDF	HDF	HEK
Cell per mL of Bioink	5×10^6	10×10^6	40×10^6