

Materials List for

# Embedded Bioprinting of Tissue-like Structures Using $\kappa$ -Carrageenan Sub-microgel Medium

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## Materials

Name	Company	Catalog Number	Comments
3D bioprinter	Custom-designed		
4',6-Diamidino-2-Phenylindole	Solarbio Life Science	C0065	Ready-to-use
405 nm UV light	EFL	XY-WJ01	
Cell Counter	Corning	Cyto smart 6749	
Confocal laser scanning microscope	Leica	STELLARIS 5	
DMEM high glucose	VivaCell	C3113-0500	High Glucose, with Sodium Pyruvate and L-Glutamine
Dynamic rotational rheometer	TA Instrument	Discovery HR-20	
Esophageal smooth muscle cells	Supplied by the Department of Cell Biology and Regenerative Medicine, Health Science Center, Ningbo University		Primary cells from the rabbit esophagus
Fetal bovine serum	UE	F9070L	
Fluorescein isothiocyanate labeled phalloidin	Solarbio Life Science	CA1610	300T
Gelatin methacrylate	EFL	EFL-GM-60	60% substitution
$\kappa$ -carrageenan	Aladdin	C121013-100g	Reagent grade
Lithium Phenyl (2,4,6-trimethylbenzoyl) phosphinate	Aladdin	L157759-1g	365~405 nm
Live-Dead kit	beyotime	C2015M	
Microplate reader	Potenov	PT-3502B	
Paraformaldehyde	Solarbio Life Science	P1110	4%
Penicillin/streptomycin	Solarbio Life Science	MA0110	100 $\mu$
Phosphate buffered saline	VivaCell	C3580-0500	pH 7.2-7.4
Silk fibroin methacrylate	EFL	EFL-SilMA-001	39% substitution
Triton X-100	Solarbio Life Science	T8200	
Trypsin-EDTA	VivaCell	C100C1	0.25%, without phenol red