

Materials List for:

# Generation of 3D Skin Organoid from Cord Blood-derived Induced Pluripotent Stem Cells

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## Materials

Name	Company	Catalog Number	Comments
Adenine	Sigma	A2786	Component of differentiation medium for fibroblast
AggreWell Medium (EB formation medium)	STEMCELL	05893	EB formation
Anti-Fibronectin antibody	abcam	ab23750	Fibroblast marker
Anti-KRT14 antibody	abcam	ab7800	Keratinocyte marker
Anti-Loricrin antibody	abcam	ab85679	Stratum corneum marker
Anti-p63 antibody	abcam	ab124762	Keratinocyte marker
Anti-Vimentin antibody	Santa cruz	sc-7558	Fibroblast marker
BAND AID FLEXIBLE FABRIC	Johnson & Johnson	-	Bandage
Basement membrane matrix (Matrigel)	BD	354277	Component of differentiation medium for fibroblast
BLACK SILK suture	AILEEE	SK617	Skin graft
CaCl <sub>2</sub>	Sigma	C5670	Component of epithelial medium for 3D skin organoid
Collagen type I	BD	354236	3D skin organoid
Collagen type IV	Santa-cruz	sc-29010	Component of differentiation medium for keratinocyte
Defined keratinocyte-Serum Free Medium	Gibco	10744-019	Component of differentiation medium for keratinocyte
DMEM, high glucose	Gibco	11995065	Component of differentiation medium
DMEM/F12 Medium	Gibco	11330-032	Component of differentiation medium
Essential 8 medium	Gibco	A1517001	iPSC medium
FBS, Qualified	Corning	35-015-CV	Component of differentiation medium for fibroblast and keratinocyte
Glutamax Supplement	Gibco	35050061	Component of differentiation medium for fibroblast
Insulin	Invitrogen	12585-014	Component of differentiation medium for fibroblast and keratinocyte
Iris standard curved scissor	Professional	PC-02.10	Surgical instrument
Keratinocyte Serum Free Medium	Gibco	17005-042	Component of differentiation medium for keratinocyte

L-ascorbic acid 2-phosphata sesquimagnesium salt hydrate	Sigma	A8960	Component of differentiation medium for keratinocyte
MEM Non-Essential Amino Acid	Gibco	1140050	Component of differentiation medium for fibroblast
Meriam Forceps Thumb 16 cm	HIROSE	HC 2265-1	Surgical instrument
NOD.CB17-Prkdc SCID/J	The Jackson Laboratory	001303	Mice strain for skin graft
Petri dish 90 mm	Hyundai Micro	H10090	Plastic ware
Recombinant Human BMP-4	R&D	314-BP	Component of differentiation medium for keratinocyte
Recombinant human EGF protein	R&D	236-EG	Component of differentiation medium for keratinocyte
Retinoic acid	Sigma	R2625	Component of differentiation medium for keratinocyte
T/C Petridish 100 mm, 240/bx	TPP	93100	Plastic ware
Transferrin	Sigma	T3705	Component of epithelial medium for 3D skin organoid
Transwell-COL collagen-coated membrane inserts	Corning	CLS3492	Plastic ware for 3D skin organoid
Vitronectin	Life technologies	A14700	iPSC culture
Y-27632 Dihydrochloride	peprotech	1293823	iPSC culture