

**Materials List for:****Evaluation of Keratinocyte Proliferation on Two- and Three-dimensional Type I Collagen Substrates**Hitomi Fujisaki<sup>1</sup>, Sugiko Futaki<sup>2</sup>, Kazunori Mizuno<sup>1</sup>, Shunji Hattori<sup>1</sup><sup>1</sup>Nippi Research Institute of Biomatrix<sup>2</sup>Department of Anatomy and Cell Biology, Osaka Medical CollegeCorrespondence to: Hitomi Fujisaki at [fujisaki@nippi-inc.co.jp](mailto:fujisaki@nippi-inc.co.jp)URL: <https://www.jove.com/video/59339>

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**Materials**

Name	Company	Catalog Number	Comments
Albumin, from bovine serum (BSA)	Merck KGaA	A4503	
1 % BSA	Merck KGaA	A4503	Dissolve 1 g of BSA powder in 100 mL of PBS (-) and filtrate
Cell Counting Kit-8	Dojindo Molecular Technologies, Inc.	347-07621	tetrazolium salt, 2-(2-methoxy-4-nitrophenyl)-3-(4-nitrophenyl)-5-(2,4-disulfophenyl)-2H tetrazolium, monosodium salt (WST-8)
Collagen type I (Acid soluble collagen)	Nippi Inc.	ASC-1-100-20	from bovine (any other species available, concentration is 3.0 mg/mL)
disposable membrane filter unit DISMIC cellulose acetate	ADVANTEC Co., LTD.	25CS020AS	0.2 µm pore size
human keratinocyte line cell FEPE1L-8			Donated Dr.W.G. Carter (Fred Hutchinson Cancer Research Center, Seattle, WA)
K-1	Kyokuto Seiyaku Inc.	28204	additive supplement with 500 mg of BSA, 500 mg of bovine pituitarybody extracts, 2.5 mg of insulin, 0.05 µg of h-EGF and 5 mg of heparin
K110 Type-II medium	Kyokuto Seiyaku Inc.	28204	keratinocyte basal culture medium
K110 Type-II medium with K-1 and Penicillin-Streptomycin (K110)	Kyokuto Seiyaku Inc.	28204	Add 5 mL of Penicillin-Streptomycin and 10 mL of additive supplement (K-1) in 500 mL of K110 type-II keratinocyte basal culture medium
PBS (-)	Merck KGaA	P-5368	Dissolve 1 pouch of PBS (-) powder in 1000 mL of deionized water and filtrate
10x PBS (-)	Merck KGaA	P-5368	Dissolve 1 pouch of PBS (-) powder in 100 mL of deionized water and filtrate
Penicillin-Streptomycin	MP Biomedicals, LLC	1670049	10000 units/mL of penicillin G and 10,000µg/mL of streptomycin sulfate in physiological saline
Phosphate buffered saline BioPerformance CertiCertified, pH 7.4	Merck KGaA	P-5368-10 pack	
Trypsin from porcine pancreas	Merck KGaA	T4799	
0.05 % trypsin	Merck KGaA	T4799	Dissolve 0.25 g of trypsin and 0.186 g of EDTA.2Na in 500 mL of PBS (-) and filtrate

Trypsin inhibitor from soybean	FUJIFILM Wako Pure Chemical corporation	202-20123	
Trypsin inhibitor	FUJIFILM Wako Pure Chemical corporation	202-20123	Dissolve 50 mg of trypsin inhibitor and 500 mg of BSA in 500 mL of PBS (-) and filtrate