

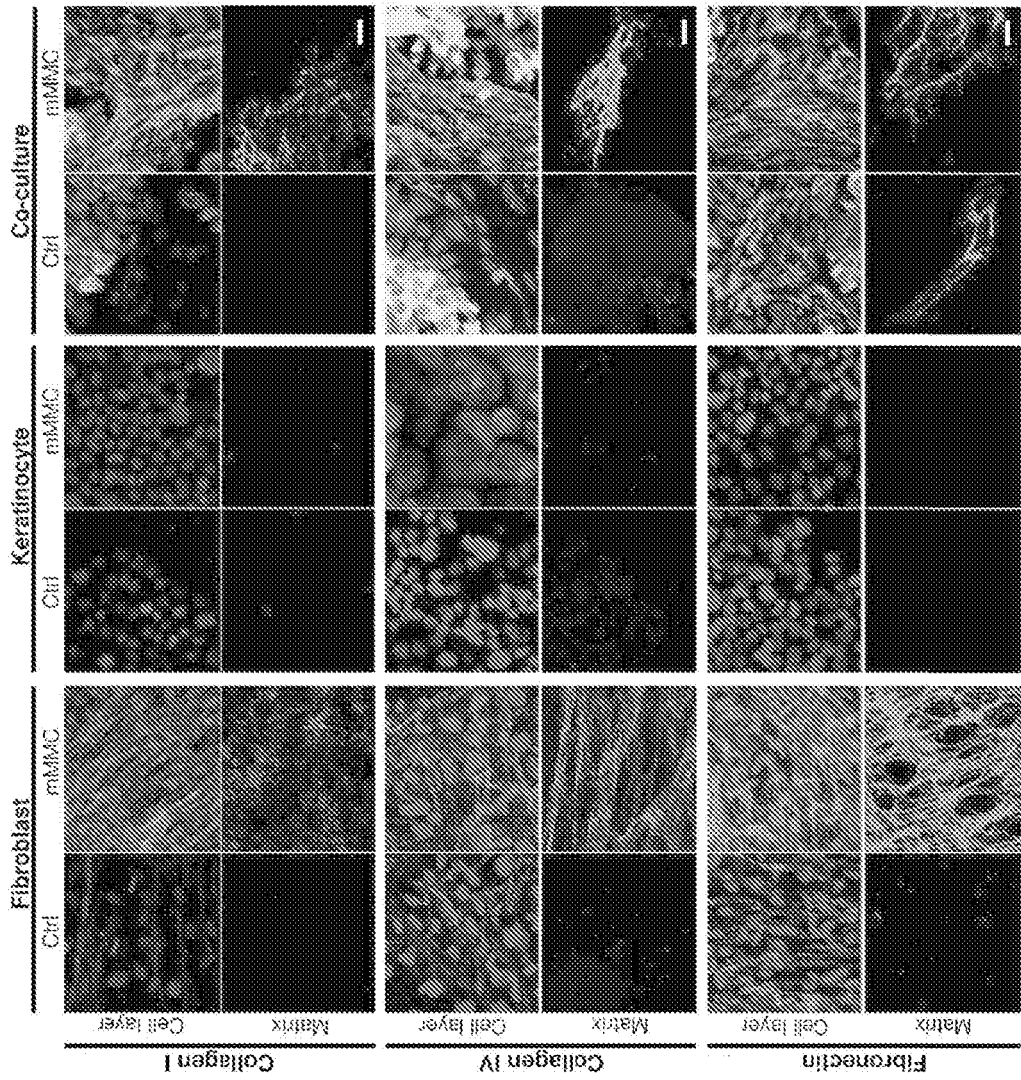


Figure 1A

Figure 1B

Figure 1C

180x167mm (300 x 300 DPI)

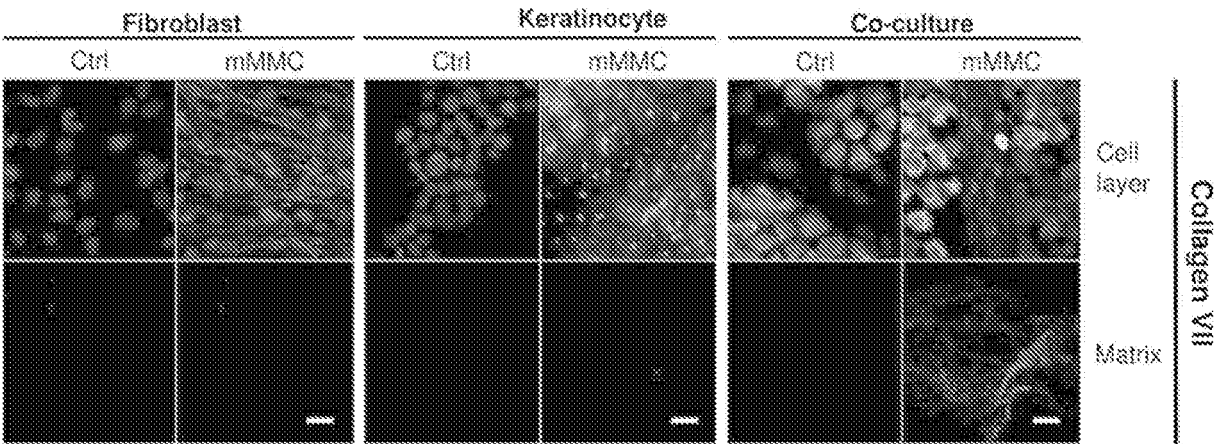


Figure 2A

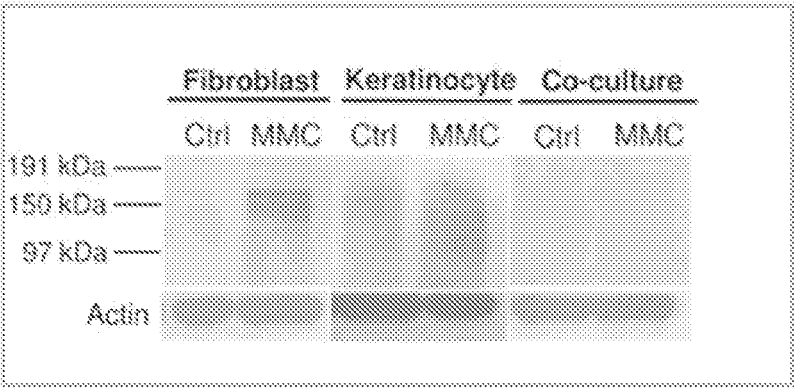
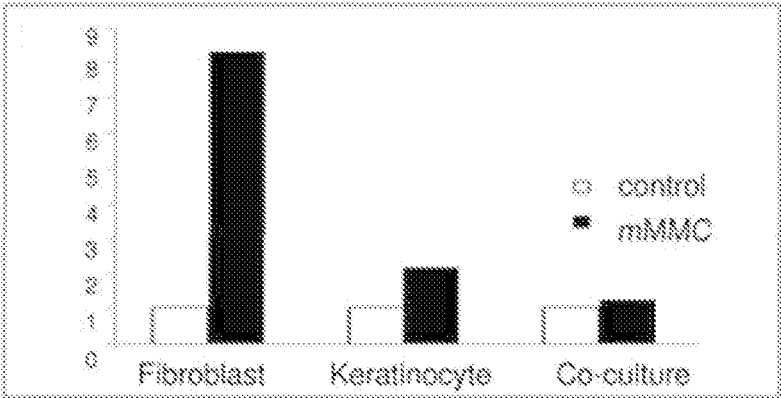
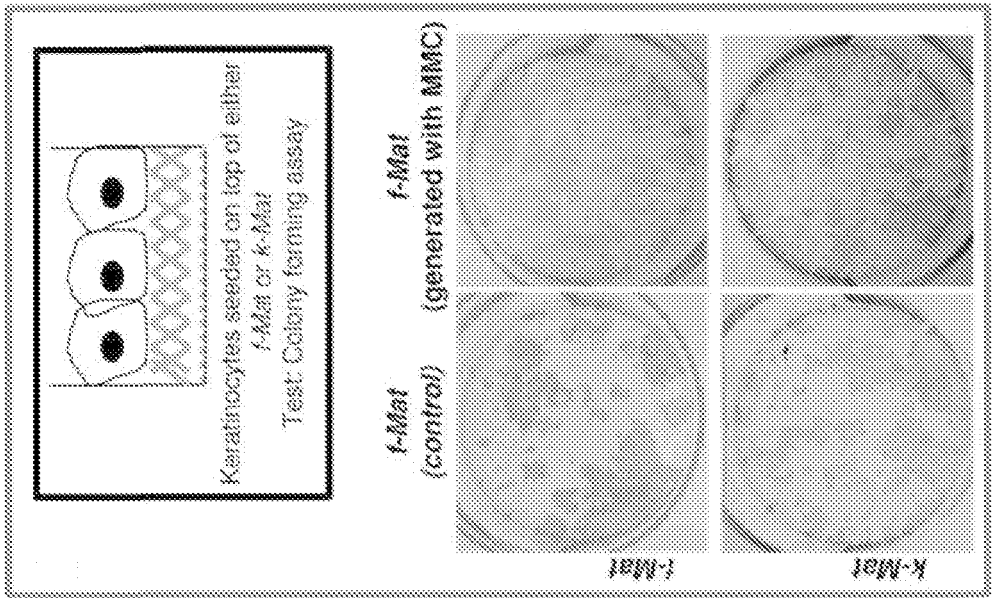


Figure 2B



251x152mm (130 x 133 DPI)

Figure 2C



180x130mm (300 x 300 DPT)

Figure 3B

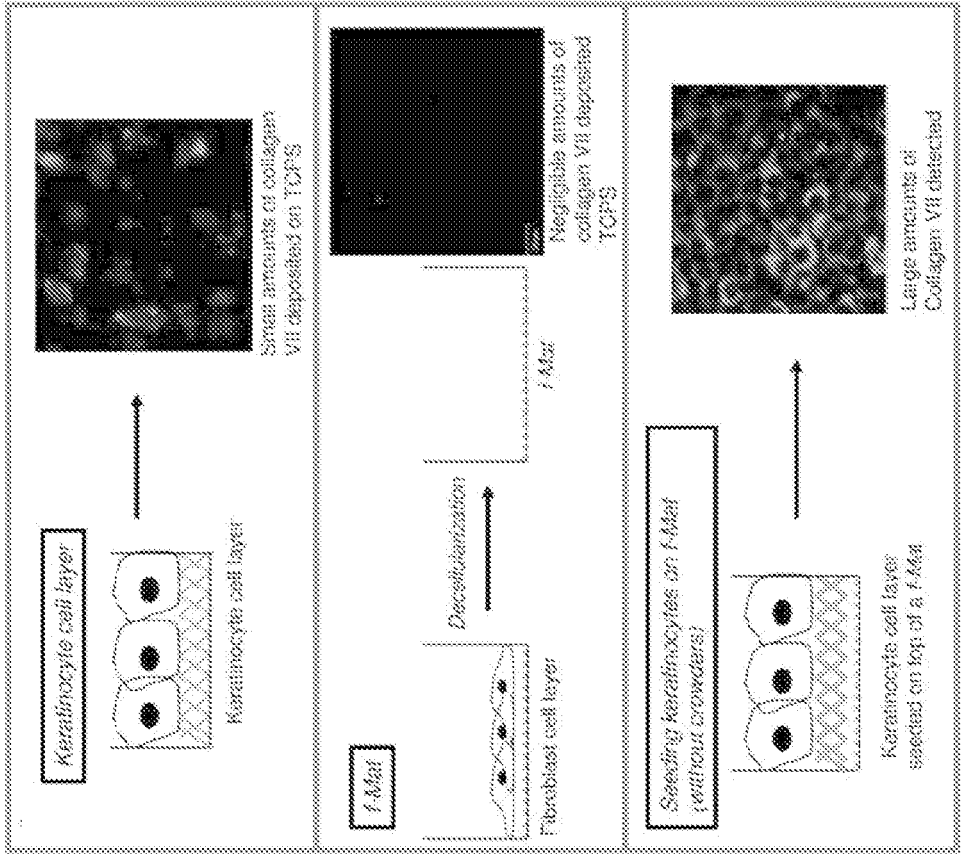
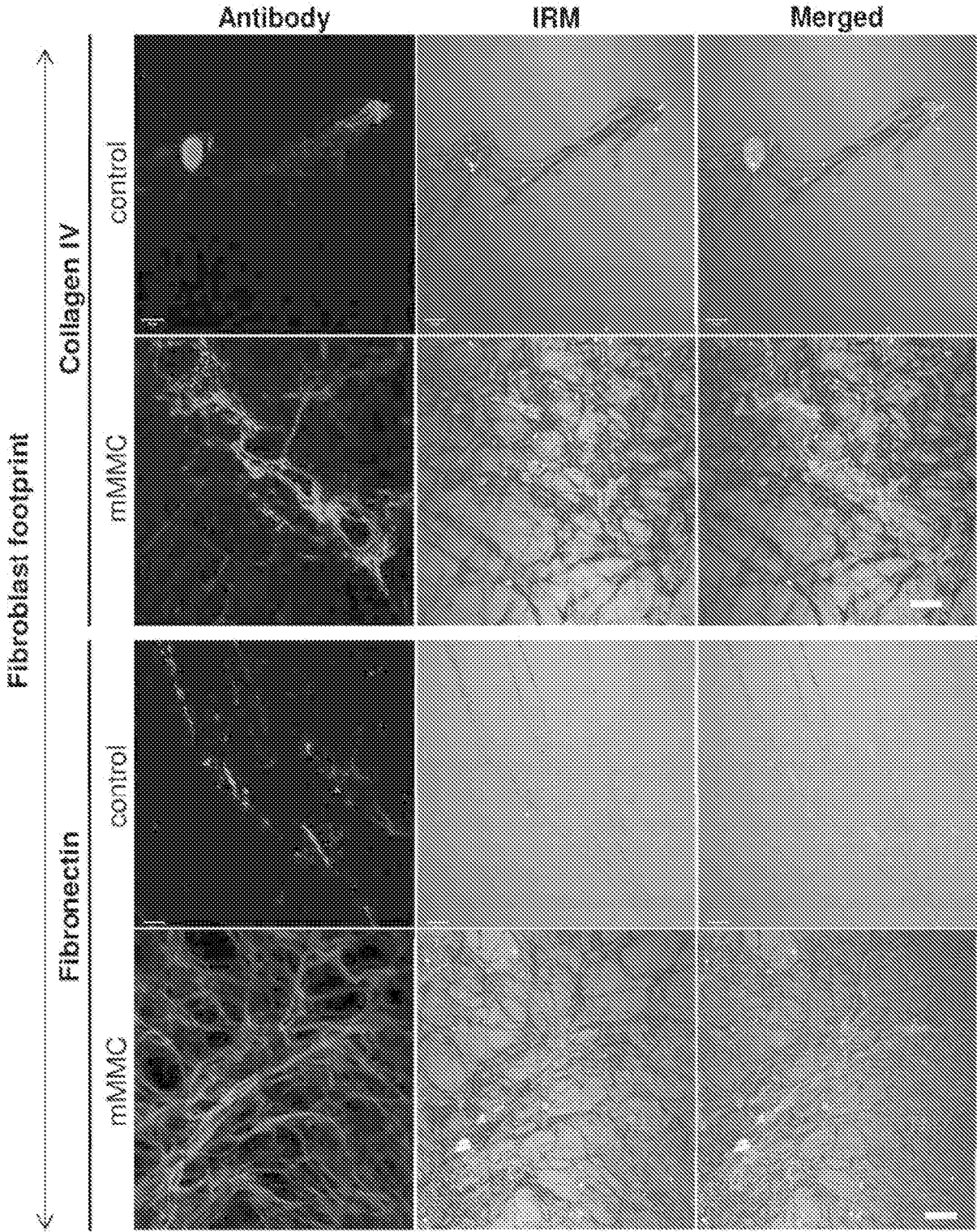
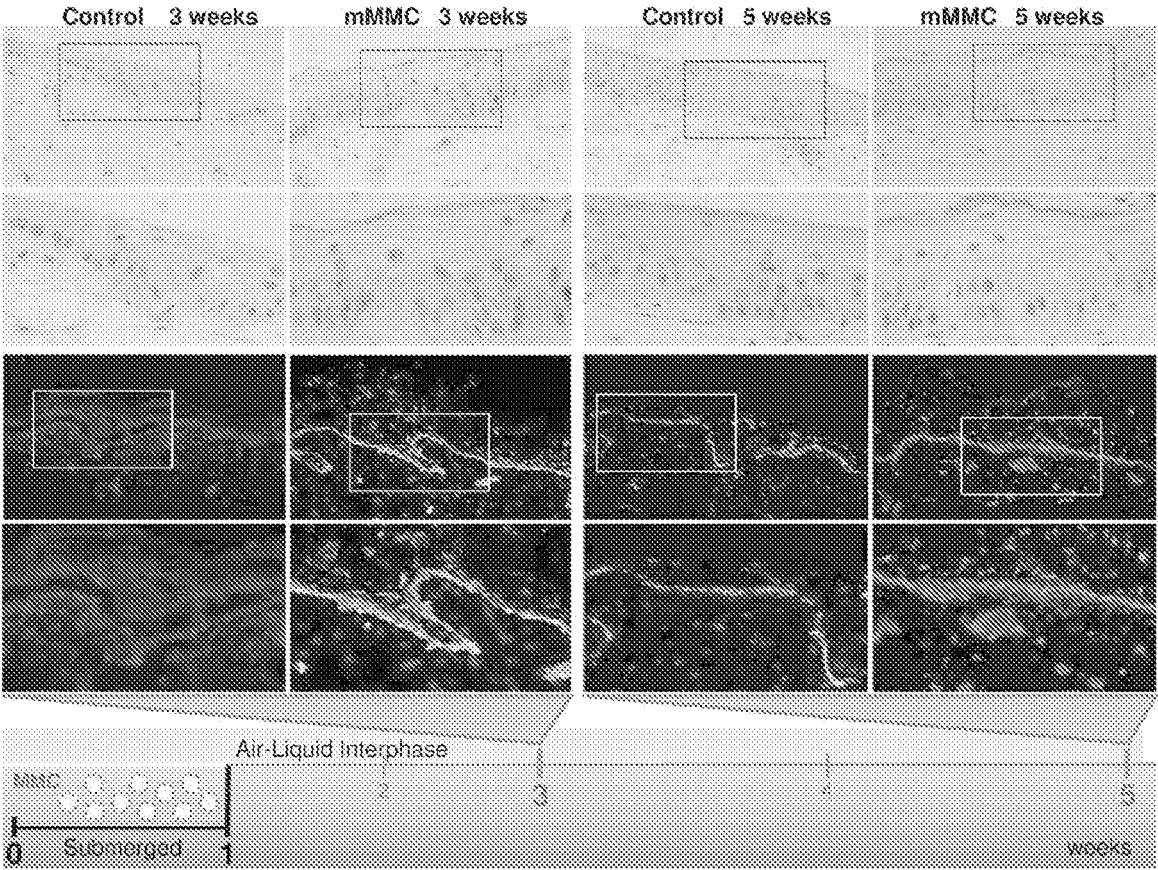


Figure 3A



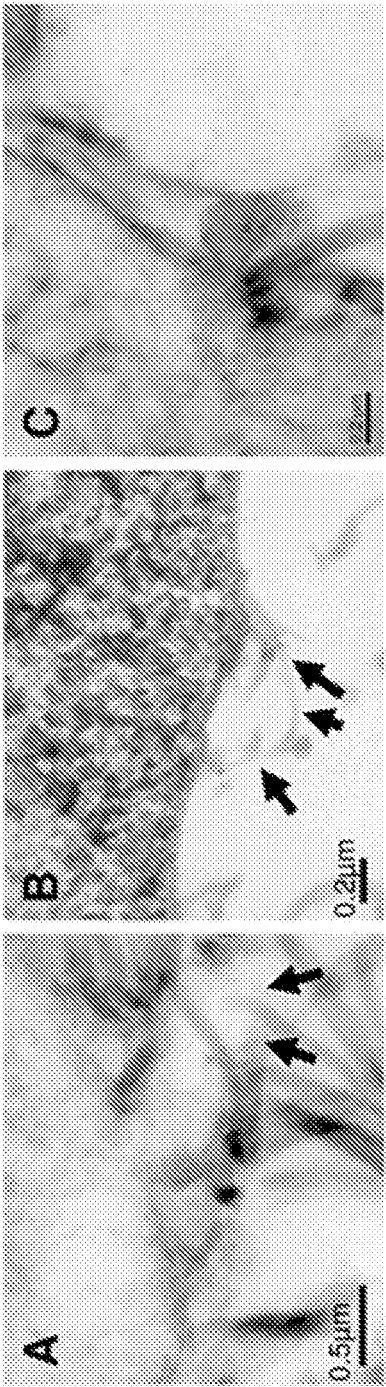
211x249mm (300 x 300 DPI)

Figure 4



134x100mm (300 x 300 DPI)

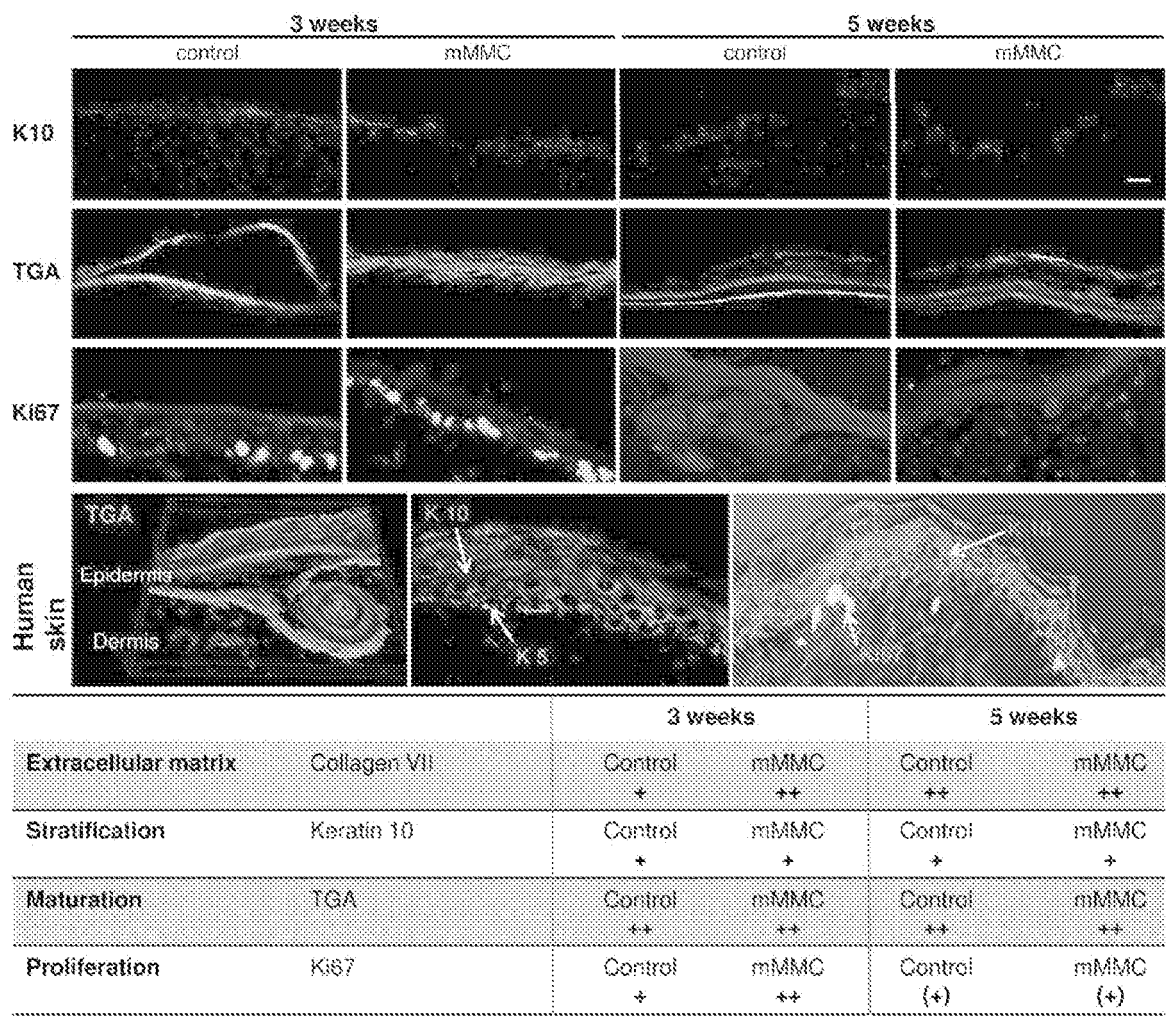
Figure 5



55x17mm (300 x 300 DPI)

Figure 6

7/23



154x133mm (300 x 300 DPI)

Figure 7

8/23

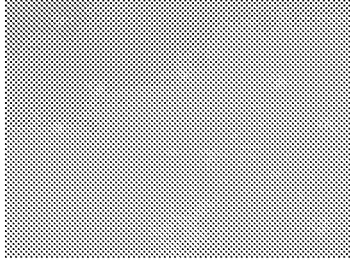
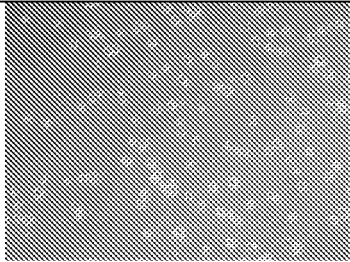
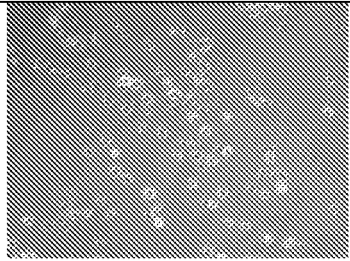
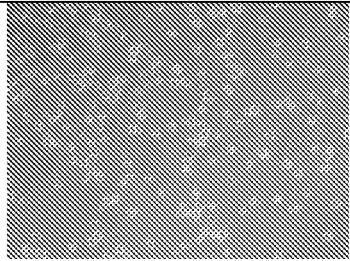
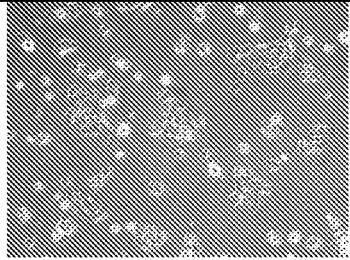
Agarose (1.25% conjugate)	24 hours post keratinocyte seeding	Observation
Agarose only		Cells do not attach
Lysine		Few cells attach
Fibronectin		Cells attach easily
Lysine + Fibronectin		Few cells attach
Plastic (no agarose)		Cells attach easily

Figure 8

9/23

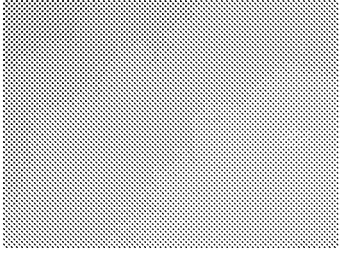
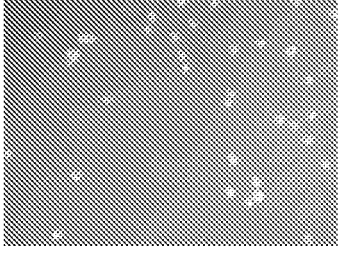
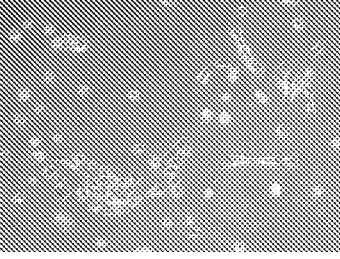
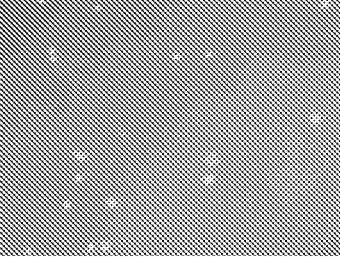
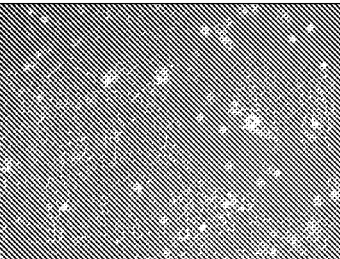
Agarose (1.25% conjugate)	48 hours post keratinocyte seeding	Observation
Agarose only		Cells do not attach
Lysine		Cells attach but do not spread
Fibronectin		Some cells attach and spread
Lysine + Fibronectin		Cells attach but do not spread
Plastic (no agarose)		Cells attach and spread

Figure 9

10/23

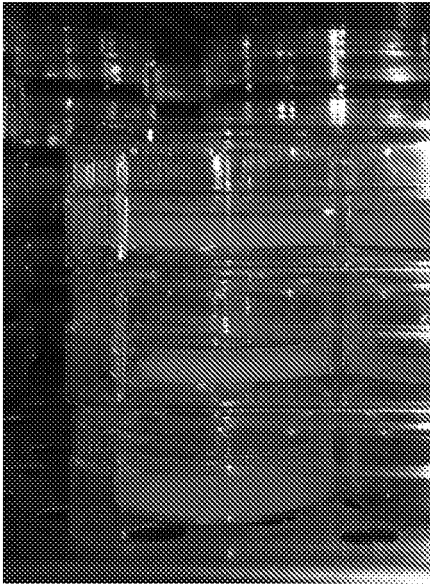
Gel	Problem: Gel shrinking over time	Problem: Gel source
Collagen Classic gel of choice especially in skin models		Animal source: Rat tail ECM type: Collagen I only
Agarose Unexplored potential in skin models and wound healing therapy		Not animal source Plant source: Seaweed ECM type: eECM

Figure 10

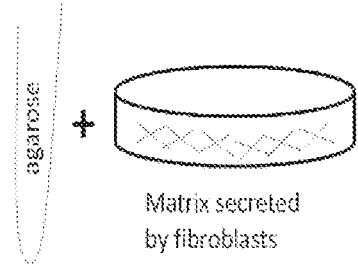
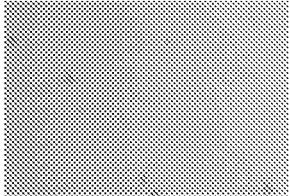
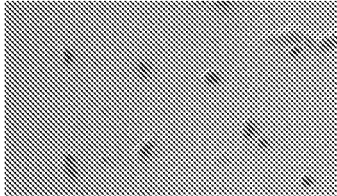
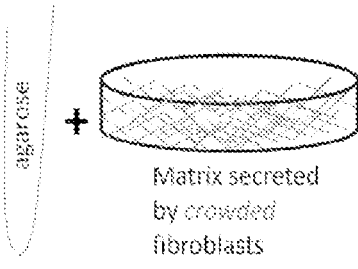
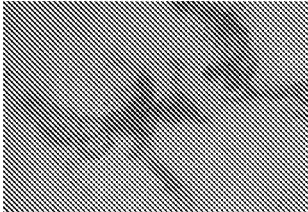
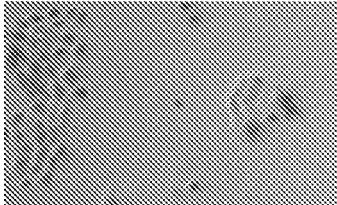
Method	Macroimage of gel	24 hours post keratinocyte seeding
 Matrix secreted by fibroblasts	 Gel is clear	 Some keratinocytes attach
 Matrix secreted by <i>crowded</i> fibroblasts	 Gel is not very clear and has visible stands or wisps of extracellular matrix (eECM)	 Keratinocytes attach and spread easily

Figure 11

12/23

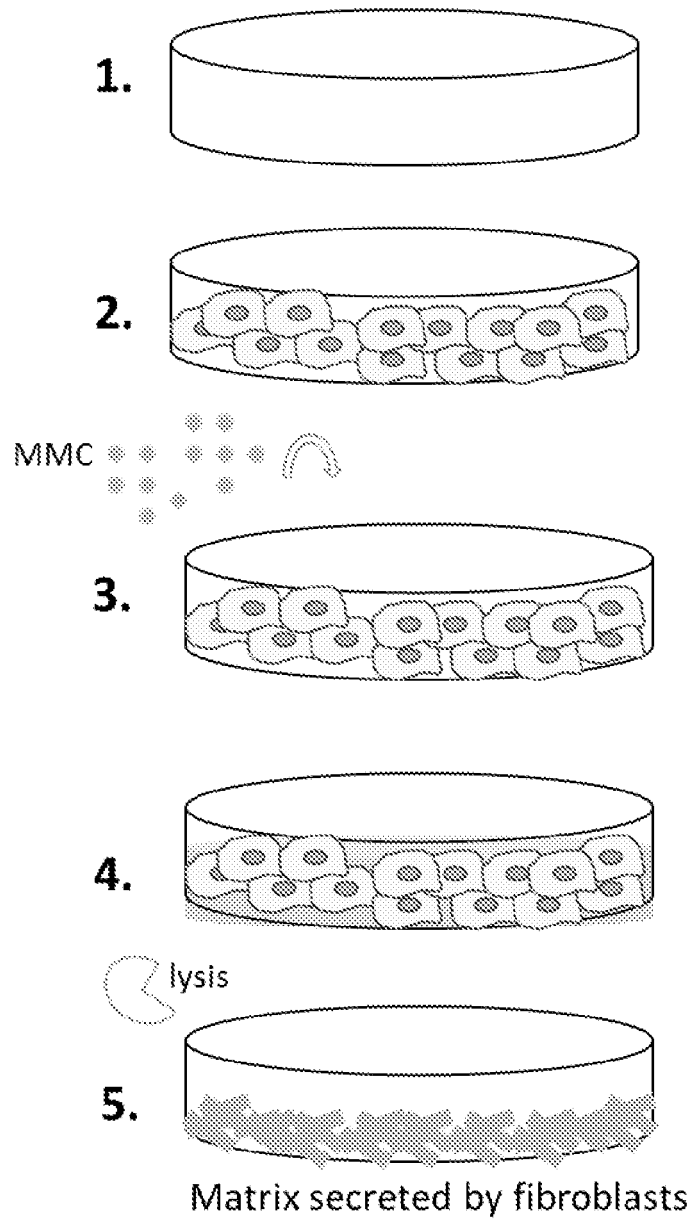


Figure 12A

13/23

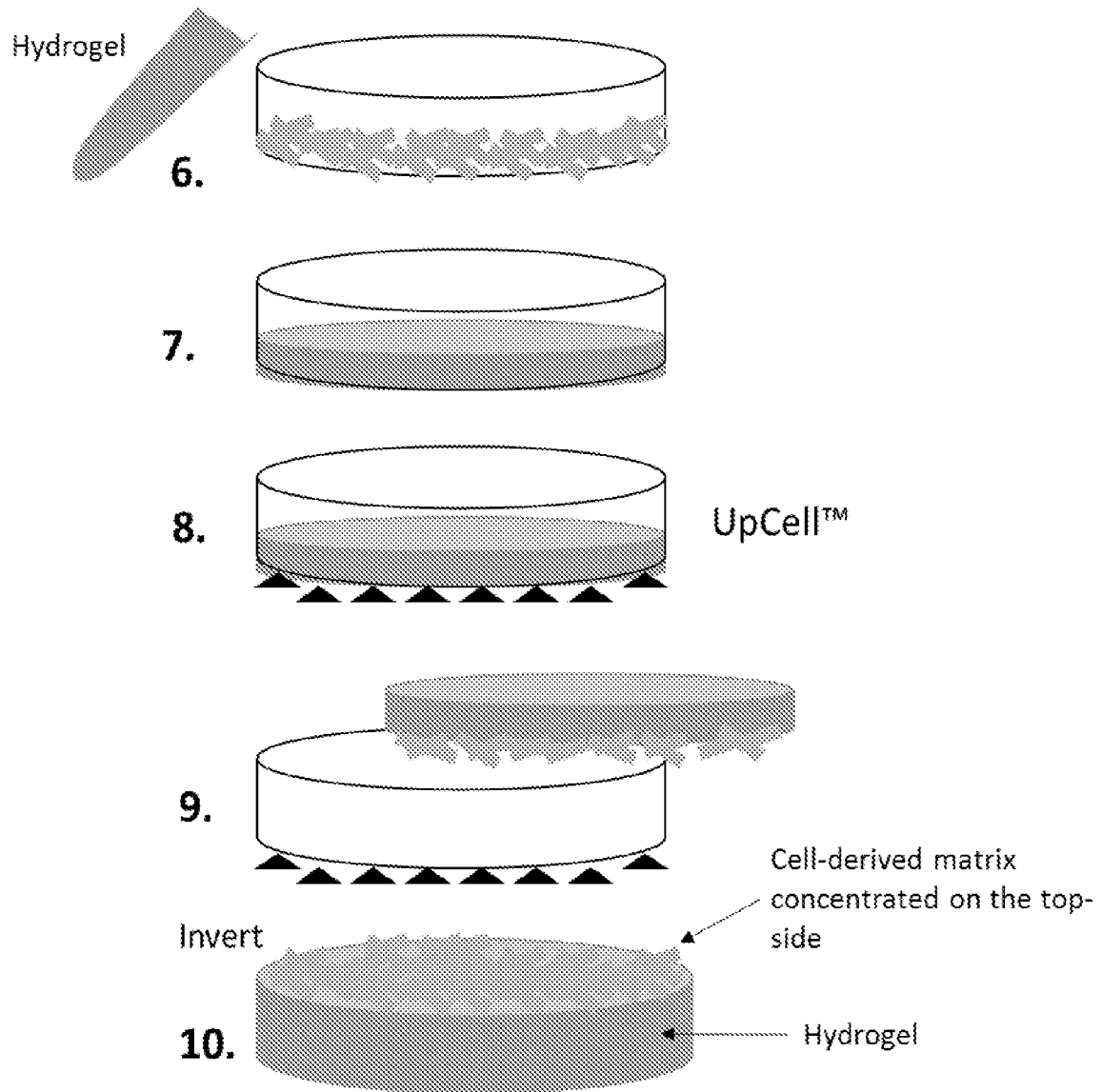
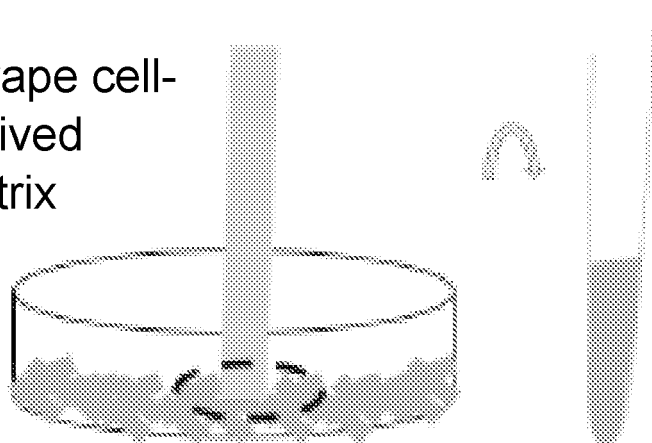


Figure 12B

14/23

Scrape cell-
derived
matrix



Mix with
gel

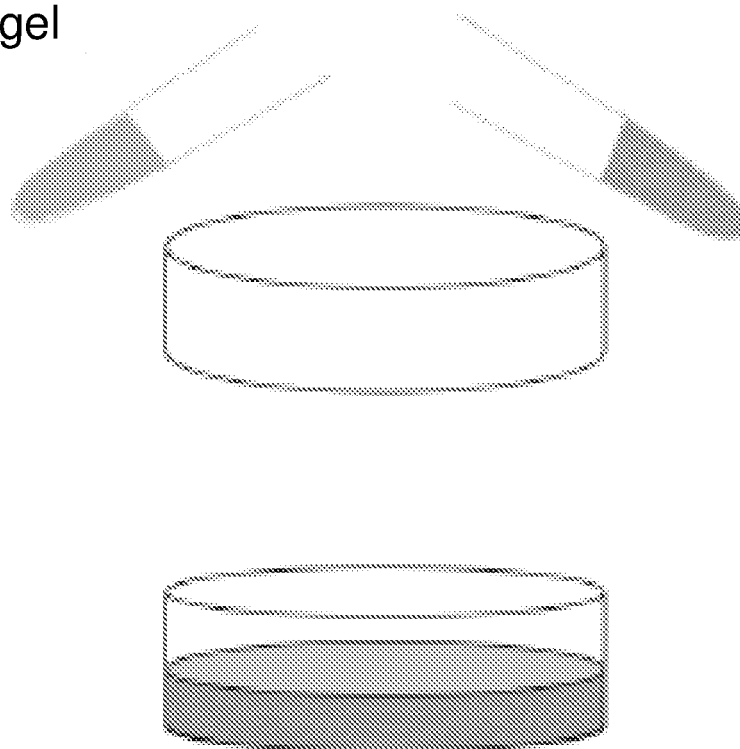


Figure 12C

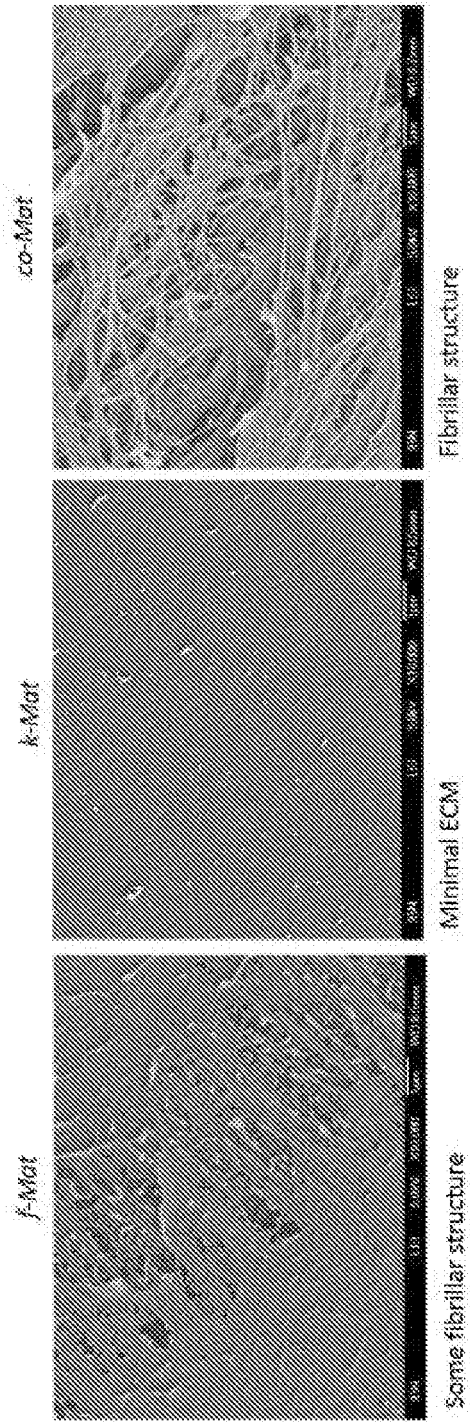


Figure 13A

Figure 13B

Figure 13C

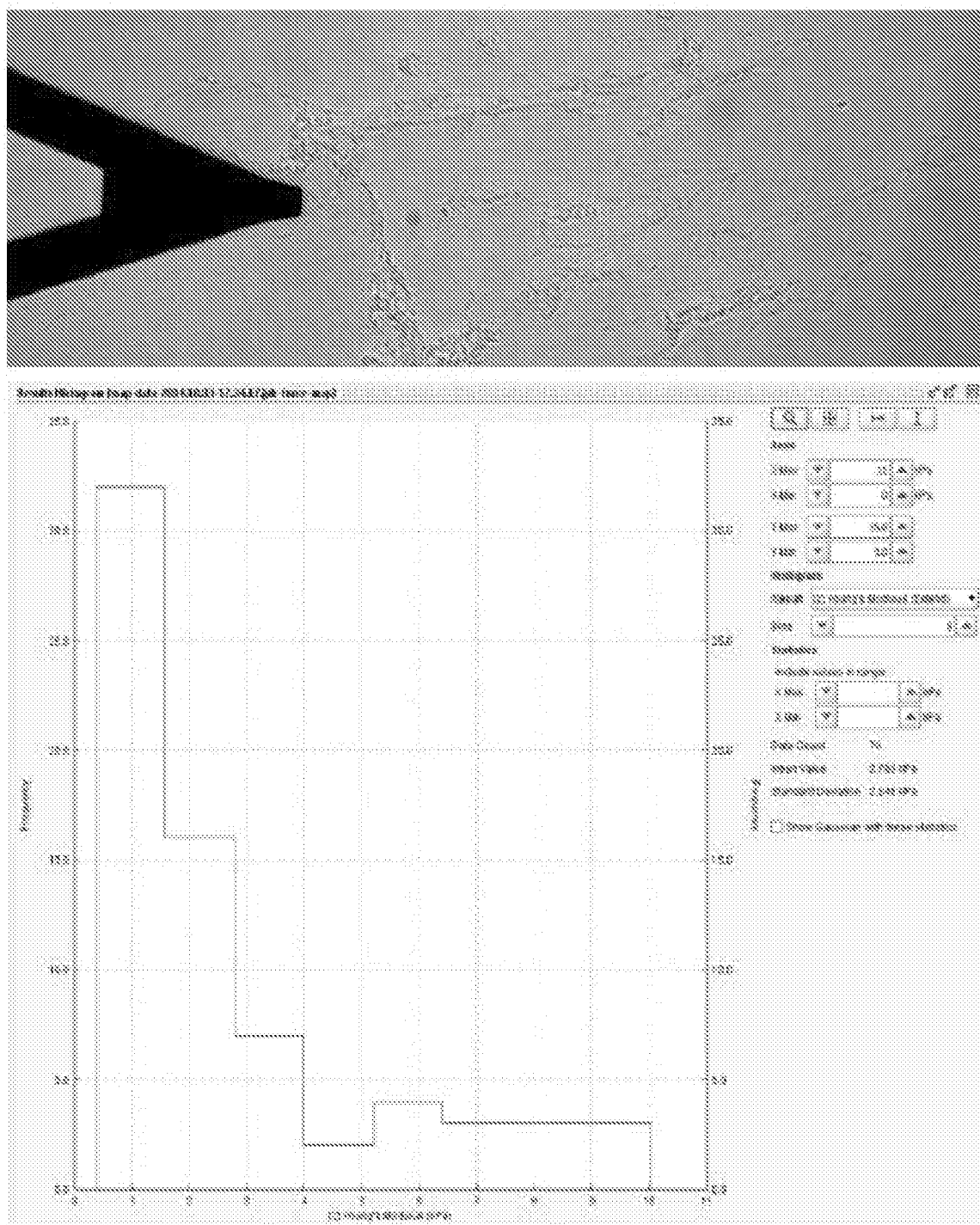


Figure 14

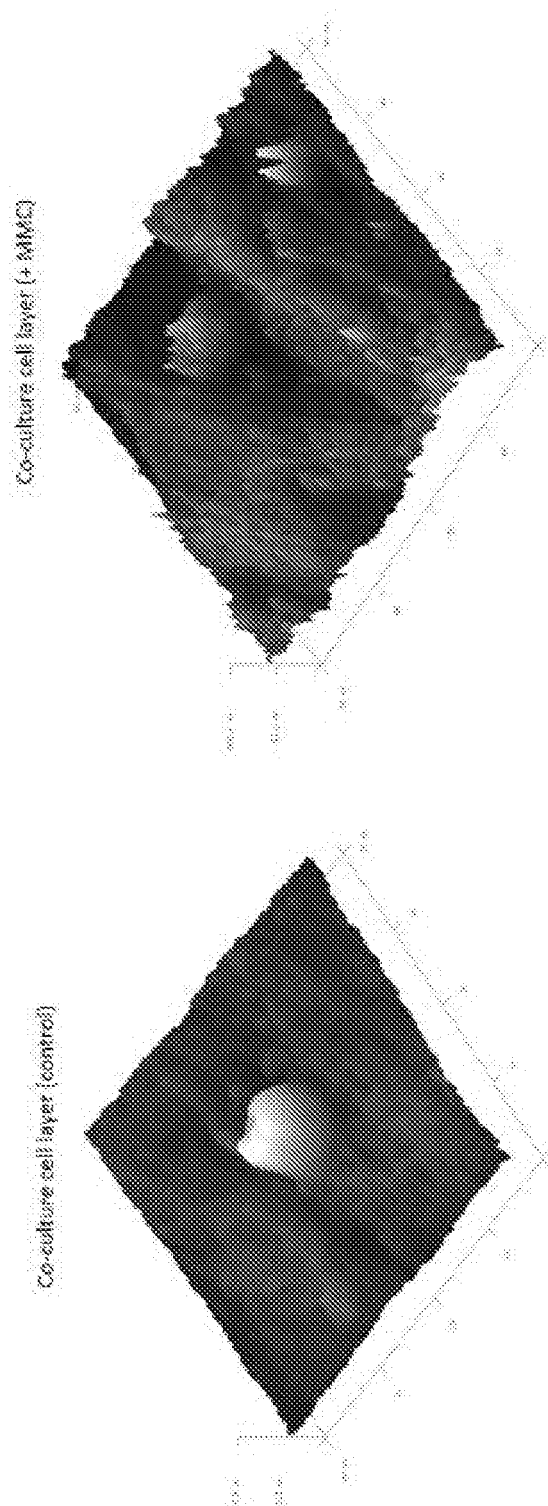


Figure 15 A

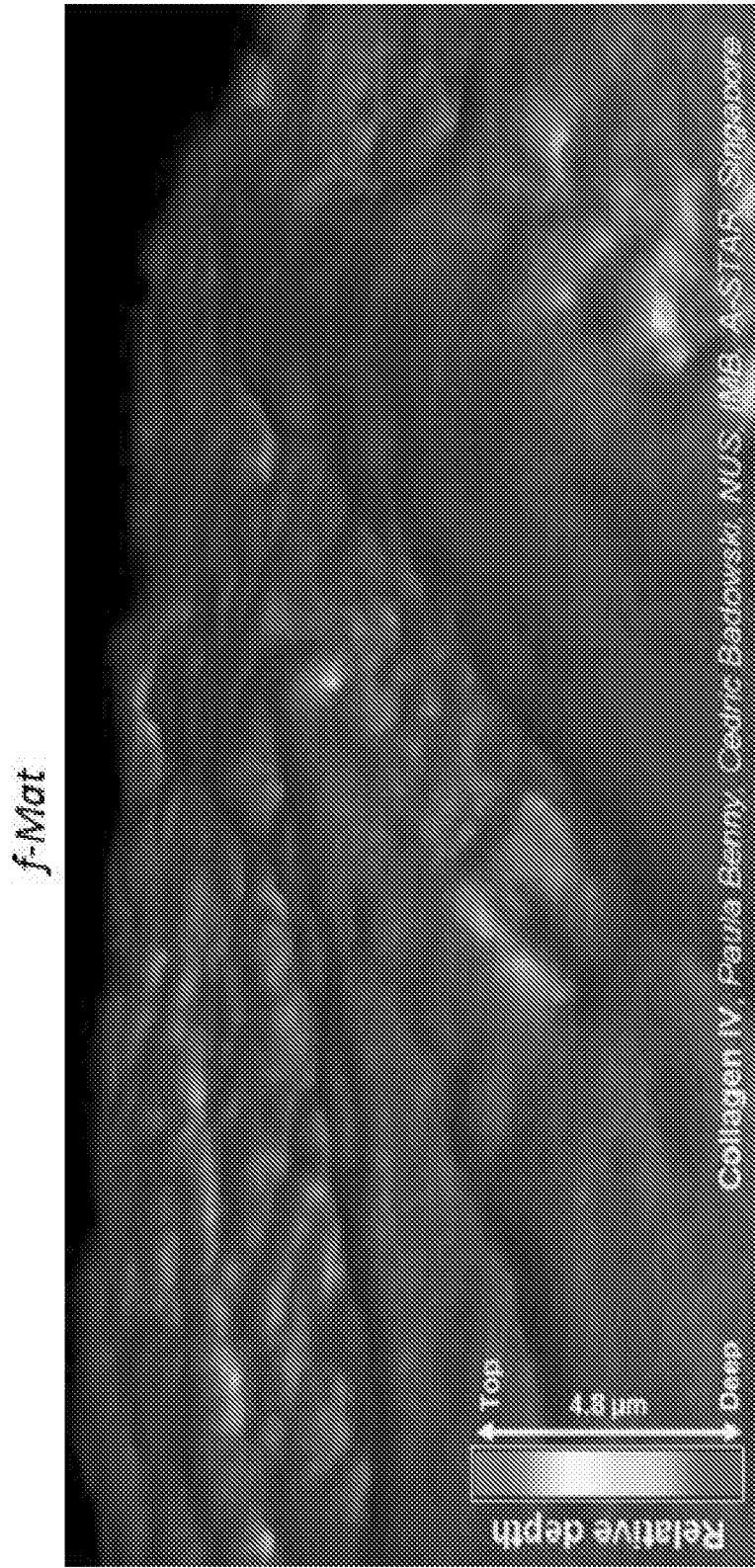


Figure 15 B

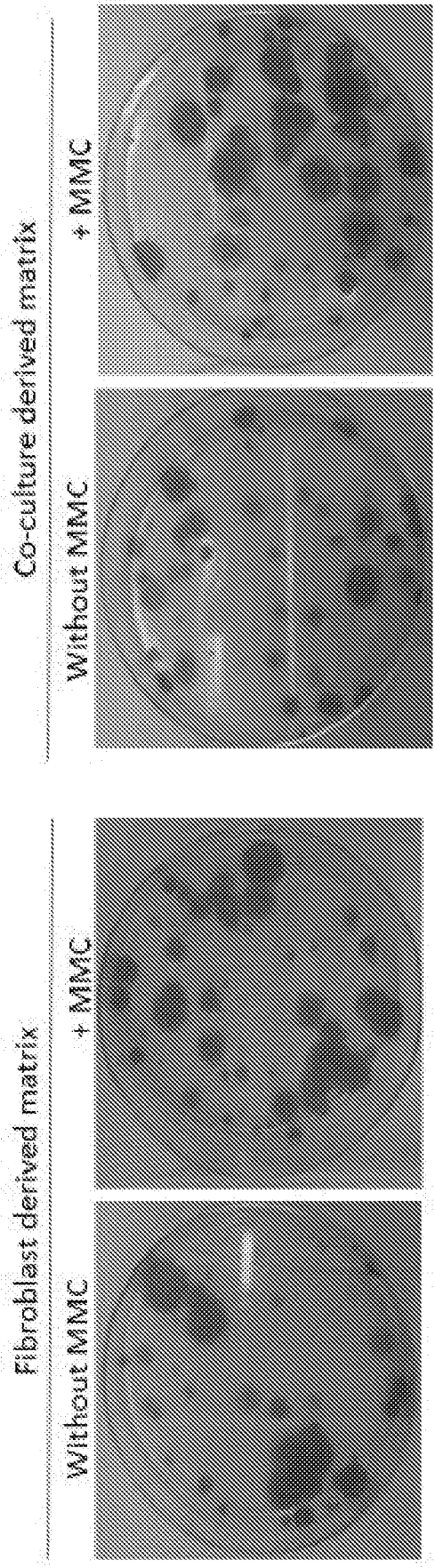


Figure 16A

Figure 16B

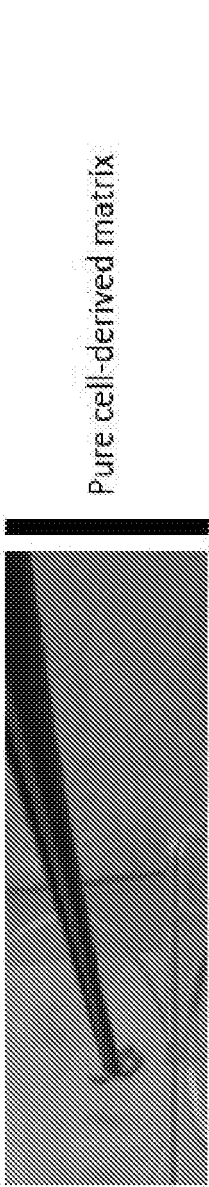


Figure 17A

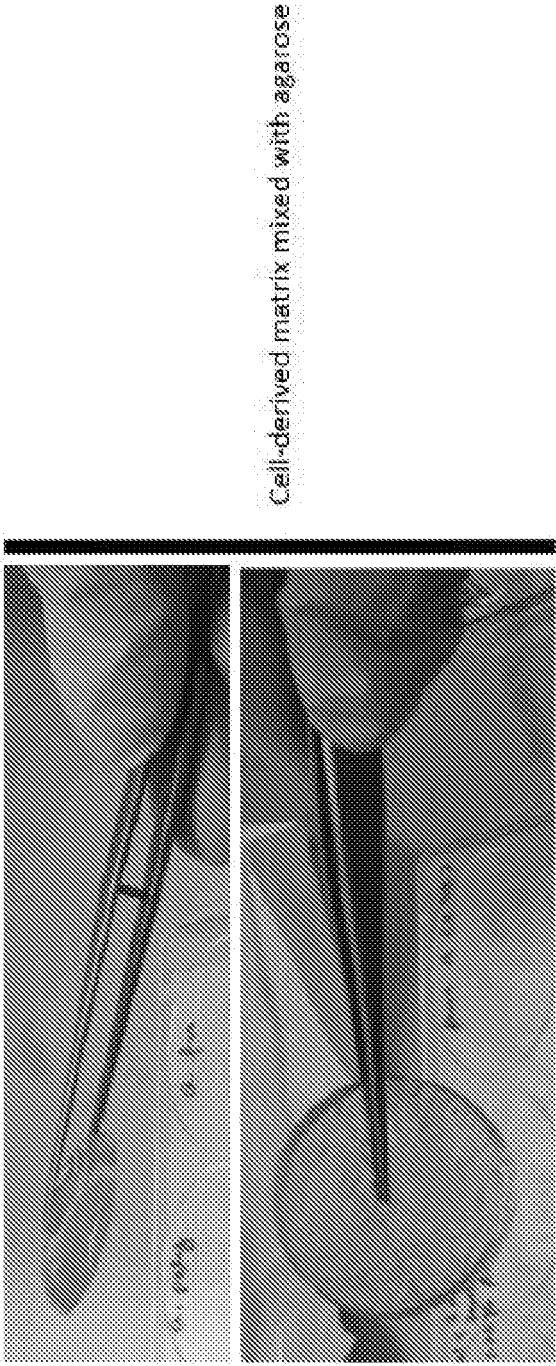


Figure 17B

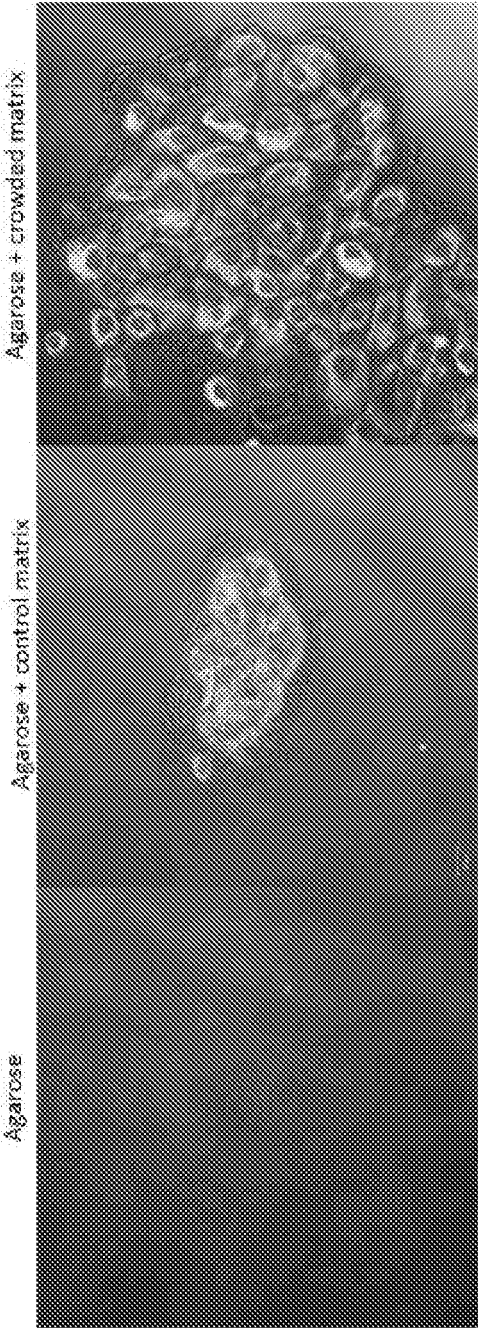
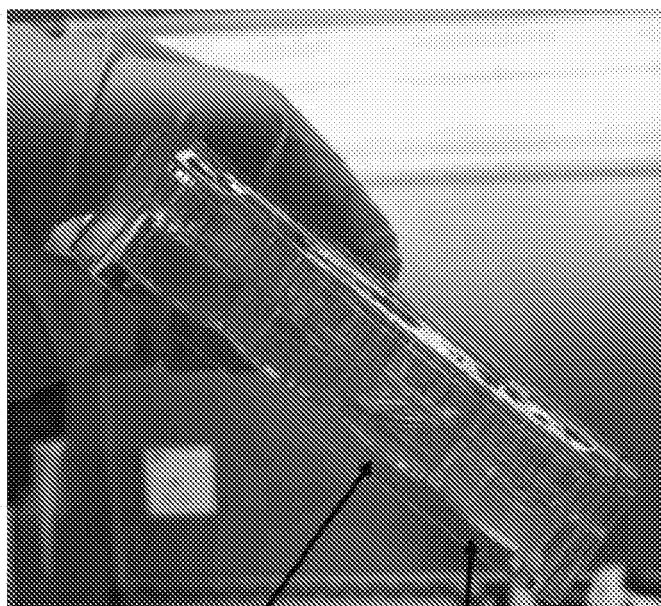


Figure 18A

Figure 18B

Figure 18C



Pure cell-derived
matrix, which was
collected, re-plated and
incubated at 37°C does
not solidify

Pure cell-derived
matrix, which was
collected, re-plated
and incubated at 37°C
together with genipin
solidifies

Figure 19

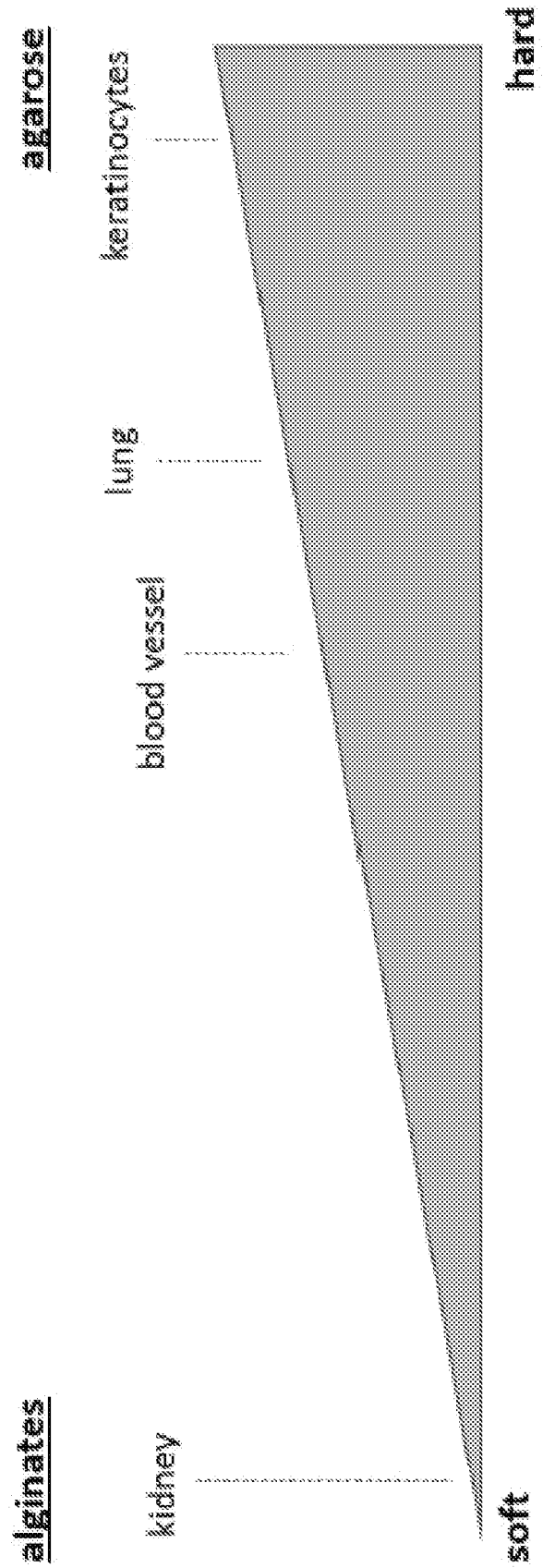


Figure 20