

## Supplementary Materials for

### **Matrix-bound nanovesicles within ECM bioscaffolds**

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#### **The PDF file includes:**

- table S1. Comparison of nucleic acid concentration from UBM, SIS, or dermis and their commercially available equivalents.
- fig. S1. Nuclease protection assay.

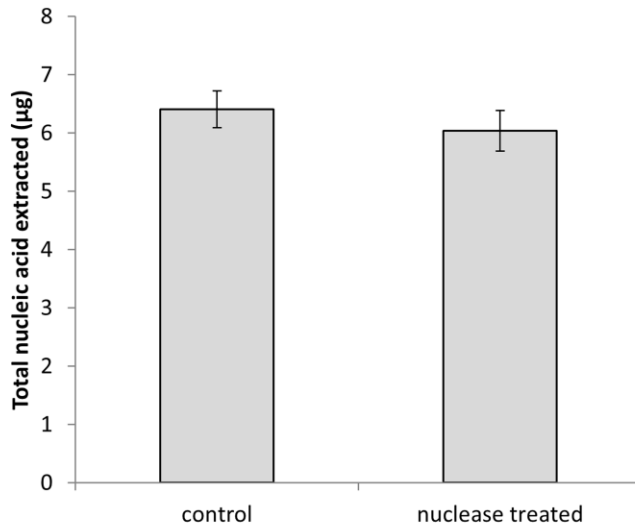
## Supplementary Materials

### Table S1

	Untreated (control)		Proteinase K		Collagenase	
	dsDNA $\mu\text{g}/\text{mg}$	Total nucleic acid $\mu\text{g}/\text{mg}$	dsDNA $\mu\text{g}/\text{mg}$	Total nucleic acid $\mu\text{g}/\text{mg}$	dsDNA $\mu\text{g}/\text{mg}$	Total nucleic acid $\mu\text{g}/\text{mg}$
UBM	1.99 $\pm$ 0.15	4.94 $\pm$ 0.31	2.58 $\pm$ 0.03	10.54 $\pm$ 0.24	2.38 $\pm$ 0.1	9.80 $\pm$ 0.37
MatriStem™	1.56 $\pm$ 0.03	5.21 $\pm$ 0.26	2.27 $\pm$ 0.07	11.93 $\pm$ 0.62	2.14 $\pm$ 0.12	9.99 $\pm$ 0.59
SIS	1.57 $\pm$ 0.13	6.97 $\pm$ 0.27	2.24 $\pm$ 0.03	12.79 $\pm$ 0.52	2.02 $\pm$ 0.1	10.62 $\pm$ 0.82
Cook® Biotech	1.46 $\pm$ 0.20	6.77 $\pm$ 0.99	2.16 $\pm$ 0.09	12.37 $\pm$ 1.21	1.80 $\pm$ 0.13	12.15 $\pm$ 0.37
Dermis	0.07 $\pm$ 0.01	0.30 $\pm$ 0.07	0.10 $\pm$ 0.01	0.56 $\pm$ 0.04	0.11 $\pm$ 0.01	0.65 $\pm$ 0.14
XenMatrix™	0.06 $\pm$ 0.00	0.29 $\pm$ 0.06	0.08 $\pm$ 0.01	0.45 $\pm$ 0.10	0.09 $\pm$ 0.01	0.64 $\pm$ 0.11

**table S1. Comparison of nucleic acid concentration from UBM, SIS, or dermis and their commercially available equivalents.** Concentration of dsDNA and total nucleic acid isolated from undigested, Proteinase K or Collagenase digested ECM scaffolds ( $\mu\text{g}$  nucleic acid/mg dry weight ECM). Data are presented as means  $\pm$  s.d., n=3 isolations per sample.

Figure S1



**fig. S1. Nuclease protection assay.** MBVs were extracted from 20mg collagenase-treated UBM, and resuspended in 100µl PBS. MBVs were treated RNase A and DNase I at room temperature for 30 minutes. Nucleic acid was extracted and the concentration measured by UV absorbance @ 260nm. The average amount of nucleic acid extracted from control (untreated) and nuclease treated samples do not differ significantly. Data are presented as means  $\pm$  s.d., n=5 isolations per sample.