

Supplementary Materials

Characterization of Porcine Urinary Bladder Matrix Hydrogels from Sodium Dodecyl Sulfate Decellularization Method

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The following are available online at www.mdpi.com/xxx/s1: Figure S1: SDS residual inside the decellularized scaffold. Table S1: Turbidimetric analysis of the UBM hydrogel gelation kinetics, using PAA decellularization method. Table S2: Turbidimetric analysis of the UBM hydrogel gelation kinetics, using SDS decellularization method. Table S3: Constants from the viscosity measurements of pre-gel solutions from PAA group. Table S4: Constants from the viscosity measurements of pre-gel solutions from SDS group.

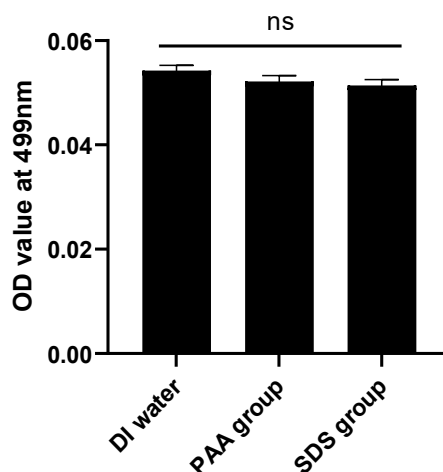


Figure S1. SDS residual inside the decellularized scaffold ($n = 3$). * Denotes a statistically significant difference.

Table S1. Turbidimetric analysis of the UBM hydrogel gelation kinetics, using PAA decellularization method ($n = 4$).

Hydrogel Concentration	Speed (min^{-1})	T_{lag} (min)	$T_{1/2}$ (min)
2 mg/mL	0.062 (± 0.005)	10.72 (± 0.57)	18.69 (± 1.38)
4 mg/mL	0.063 (± 0.003)	10.97 (± 0.58)	18.80 (± 1.01)
6 mg/mL	0.057 (± 0.002)	12.49 (± 0.60)	21.78 (± 0.40)
8 mg/mL	0.045 (± 0.007)	12.64 (± 0.19)	23.86 (± 0.64)

Table S2. Turbidimetric analysis of the UBM hydrogel gelation kinetics, using SDS decellularization method ($n = 4$).

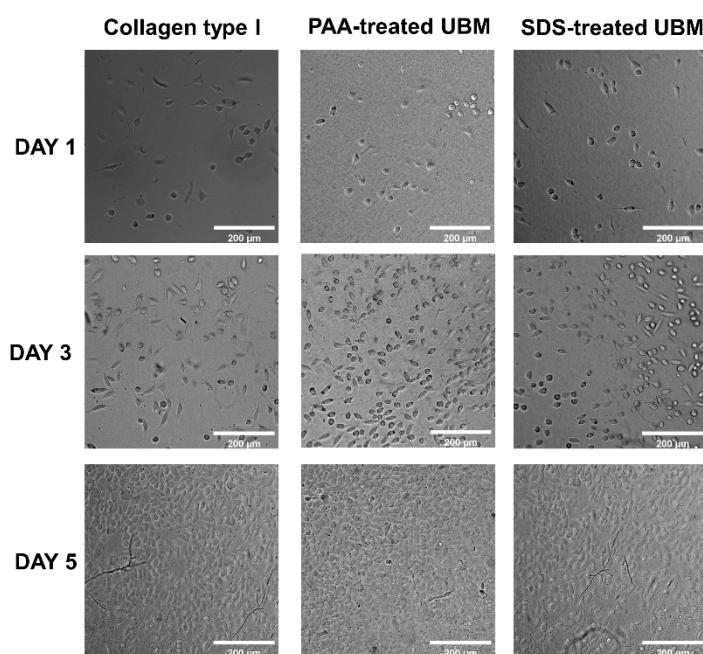
Hydrogel Concentration	Speed (min^{-1})	T_{lag} (min)	$T_{1/2}$ (min)
2 mg/mL	0.042 (± 0.008)	13.88 (± 0.80)	27.19 (± 2.25)
4 mg/mL	0.042 (± 0.009)	15.26 (± 1.11)	27.43 (± 2.60)
6 mg/mL	0.032 (± 0.002)	17.12 (± 0.58)	32.23 (± 0.35)
8 mg/mL	0.026 (± 0.002)	19.62 (± 0.80)	38.14 (± 1.14)

Table S3. Constants from the viscosity measurements of pre-gel solutions from PAA group ($n = 3$).

Concentration (mg/mL)	k	n	r^2
4	0.1521 ± 0.1154	-0.3590 ± 0.0078	0.9925 ± 0
6	1.4717 ± 0.0335	-0.5477 ± 0.005	0.9991 ± 0.0002
8	4.9812 ± 0.0584	-0.6740 ± 0.002	0.9997 ± 0

Table 4. Constants from the viscosity measurements of pre-gel solutions from SDS group ($n = 3$).

Concentration (mg/mL)	k	n	r^2
4	0.6704 ± 0.0258	-0.5267 ± 0.0075	0.9994 ± 0.0002
6	2.2318 ± 0.0921	-0.623 ± 0.0052	0.9999 ± 0.0001
8	5.3492 ± 0.4491	-0.7 ± 0.0085	0.9998 ± 0.0002

**Figure S2.** Optical images of cells cultured on hydrogel surface after 1, 3 and 5 days (scale bar: 200 μm).

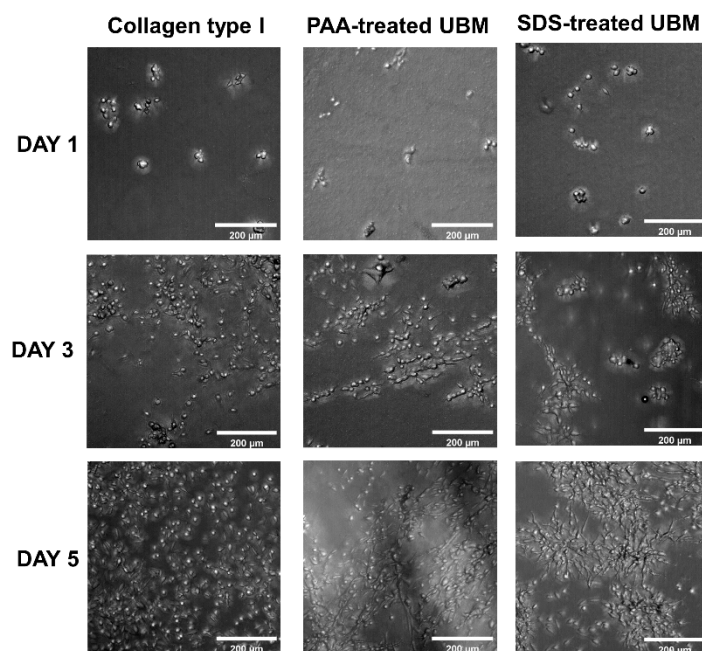


Figure S3. Optical images of cells cultured within hydrogel after 1, 3 and 5 days (scale bar: 200 μm).

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