

Soy protein and chitin sponge-like scaffolds: from natural by-products to cell delivery systems for biomedical applications

Supplementary information:

Table S1†. Amino acid composition of SPI (scaffold) expressed as number of residues per 100 residues.

SPI amino acid residues (scaffold)																	
Asp	Thr	Ser	Glu	Pro	Gly	Ala	Cys	Val	Met	Ile	Leu	Tyr	Phe	His	Lys	Arg	Trp
11.12	3.22	6.55	17.79	6.68	8.24	6.42	0.89	3.95	1.12	2.97	9.49	3.32	5.12	2.09	4.98	4.96	1.09

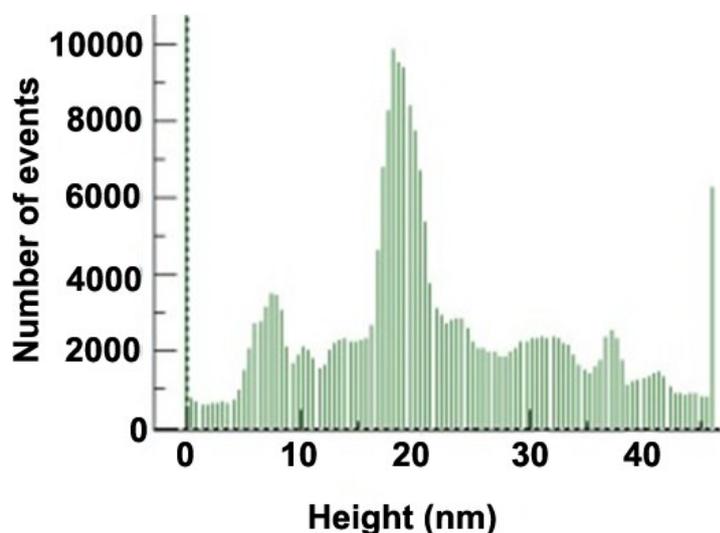


Fig. S1†. AFM distribution of heights

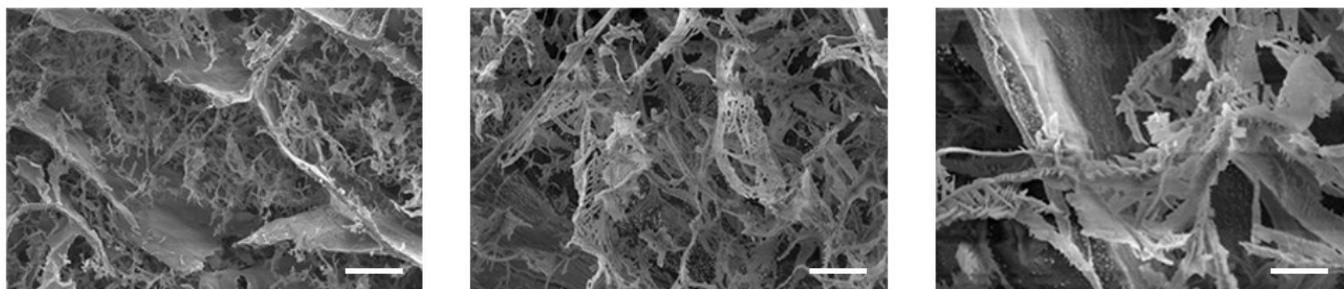


Fig. S2†. SEM micrographs of salt crystals formation in hydrated SLS after the freeze drying process. Scale bars are from left to right:

250 μm , 125 μm and 50 μm .

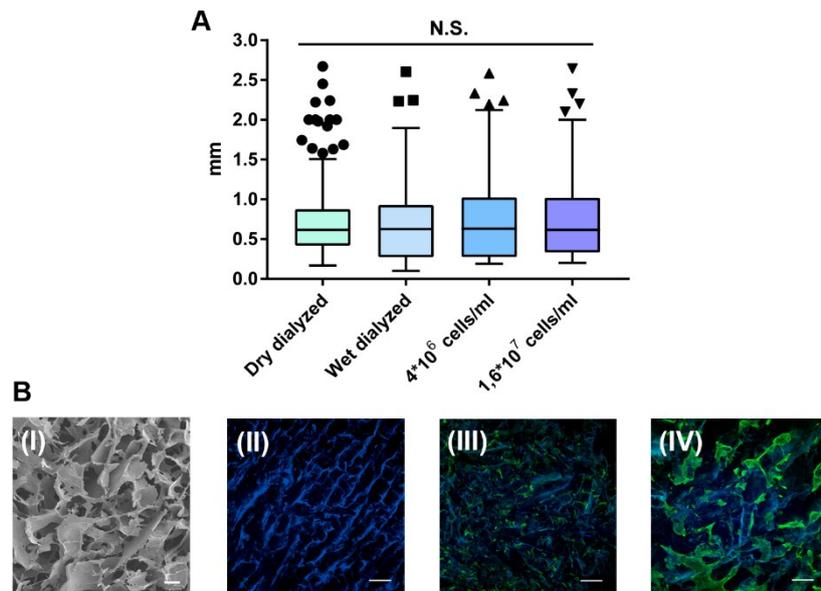


Fig. S3†. Pore size of dialyzed SLS. (A) N.S. indicates Non-significant differences between all groups. (B) SEM and Fluorescent microscopy images of SLS (Phalloidin/DAPI staining). (I) SEM image of a dialyzed SLS (dry). (II) Fluorescence microscopy of a dialyzed SLS (wet). (III) Fluorescence microscopy of a dialyzed SLS with 4×10^6 cells/ml seeded. (IV) Fluorescence microscopy of a dialyzed SLS with 1.6×10^7 cells/ml seeded. Scale bars are $300 \mu\text{m}$

Supplementary video 1†. 3D-seeding of h-MSCs within SLS

Supplementary video 2†. General appearance and handling of hydrated SLS

Supplementary video 3†. Capacity of wet SLS to recover its initial morphology when reabsorb the lost water after a full compression