

Supplemental Information

The interplay of fibronectin functionalization and TGF- β 1 presence on fibroblast proliferation, differentiation and migration in 3D matrices

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Tab. S1 qRT-PCR primer sequences used in the experiments.

Primer	Sequence (5' → 3')	Accession number
RPS26		NM_001029
Fwd.	CAA TGG TCG TGC CAA AAA G	
Rev.	TTC ACA TAC AGC TTG GGA AGC	
αSMA		NM_001141945.1
Fwd.	AGA CCC TGT TCC AGC CAT C	
Rev.	TGC TAG GGC CGT GAT CTC	
collagen I(α1)		NM_002421.3
Fwd.	GTC GCA CTG GTG ATG CTG	
Rev.	GGT GGT GTC CAC CTC GAG	
EDA-FN		NM_002026.2
Fwd.	CCA GTC CAC AGC TAT TCC TG	
Rev.	ACA ACC ACG GAT GAG CTG	

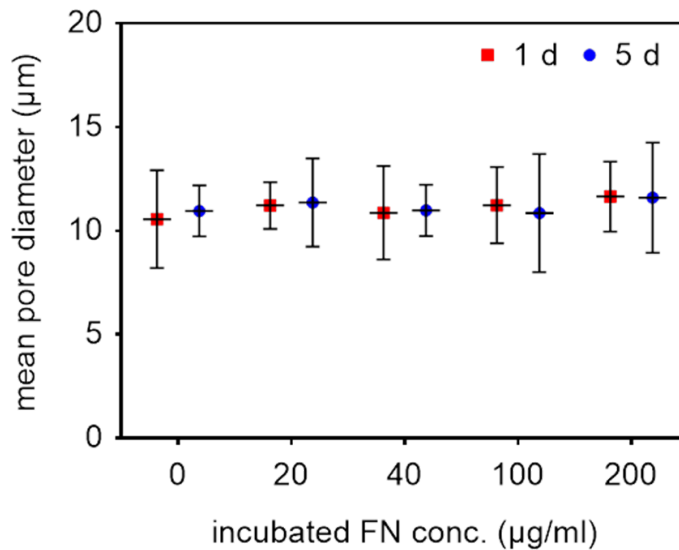


Fig. S1. Pore diameter analysis of 3D Coll I matrices with adsorptive FN immobilization. Mean pore diameter of adsorptive immobilized FN was analysed from cLSM images using the home-built image analysis tool¹. Mean pore diameters are shown in dependence on incubated FN amount after 1 d and 5 d of incubation in cell culture medium. Analysis of pore size was performed at least in triplicates with 6 positions per sample (n=3; mean±SD).

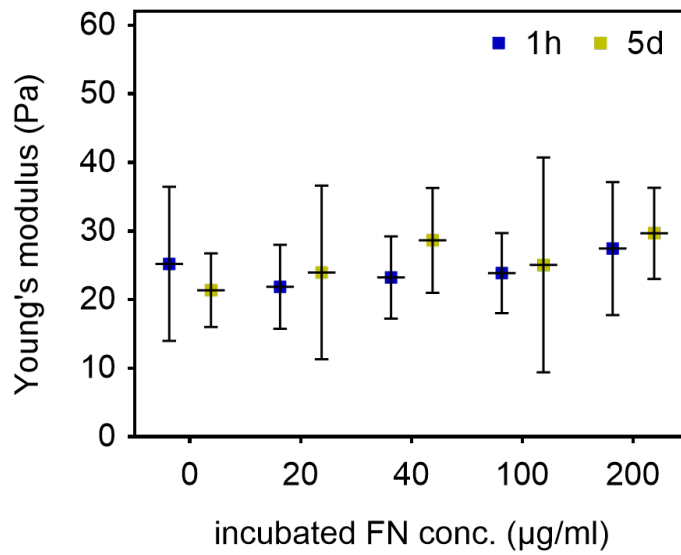


Fig. S2. Mechanical analysis of 3D Coll I matrices with adsorptive FN immobilization. Elasticity of Coll I matrices was analysed using colloidal probe technique² after 1 d and 5 d of incubation in DMEM cell culture medium with 10% FCS supplement. For the measurement of Young's modulus, at least 50 force-distance curves were measured at 3 positions in each Coll I matrix. (n=3; mean±SD).

References

- 1 K. Franke, J. Sapudom, L. Kalbitzer, U. Anderegg and T. Pompe, *Acta Biomater.*, 2014, **10**, 2693–2702.
- 2 J. Sapudom, S. Rubner, S. Martin, T. Kurth, S. Riedel, C. T. Mierke and T. Pompe, *Biomaterials*, 2015, **52**, 367–375.