

Supporting Information

Hyaluronan derived nanoparticle for simvastatin delivery: Evaluation of simvastatin induced myotoxicity in tissue engineered skeletal muscle

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Table S1: Primer Sequences used for detection of differentiation and matrix remodelling mRNA expression Levels.

Target mRNA	Primer Sequence (5'-3')	Product Length	NCBI Reference Sequence
RPII- β	F: GGTCAGAAGGGAACCTGTGGTAT	197	NM_153798.2
	R: GCATCATTAATGGAGTAGCGTC		
Myogenin	F: CCAACTGAGATTGTCTGTC	173	NM_031189.2
	R: GGTGTTAGCCTTATGTGAAT		
MMP2	F: GAGATCTTCTCTCAAGGAC	181	NM_008610.3
	R: AATAGACCCAGTACTCATTCC		
MMP9	F: CTGGCAGAGGCATACTTG	76	NM_013599.4
	R: GCCGTAGAGACTGCTTCT		

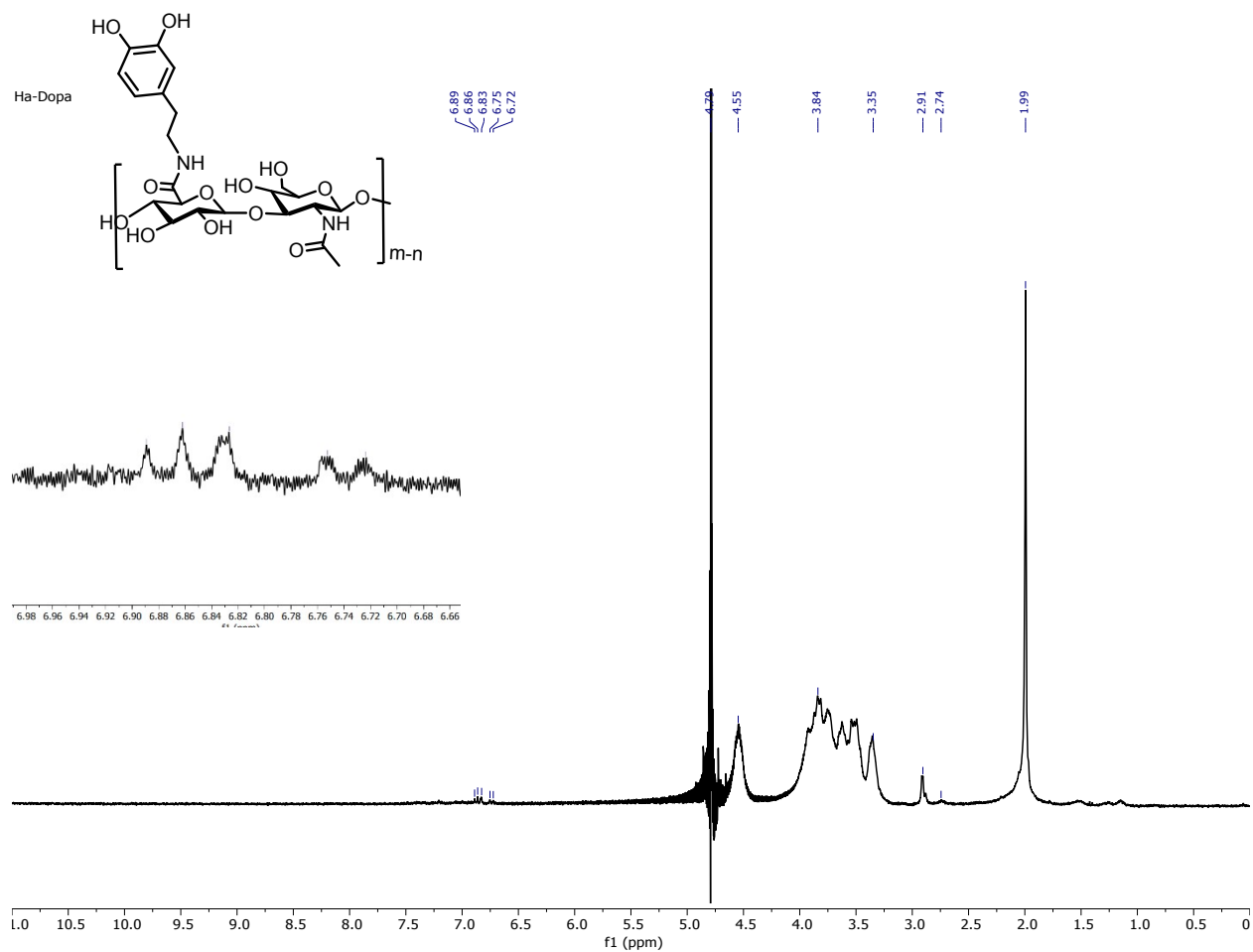


Figure S1: ¹H NMR spectrogram of HA-DA in D₂O at 25 °C. The aromatic signals do not correlate to the degree of dopamine modification due to self-assembly consistent with the literatureⁱ

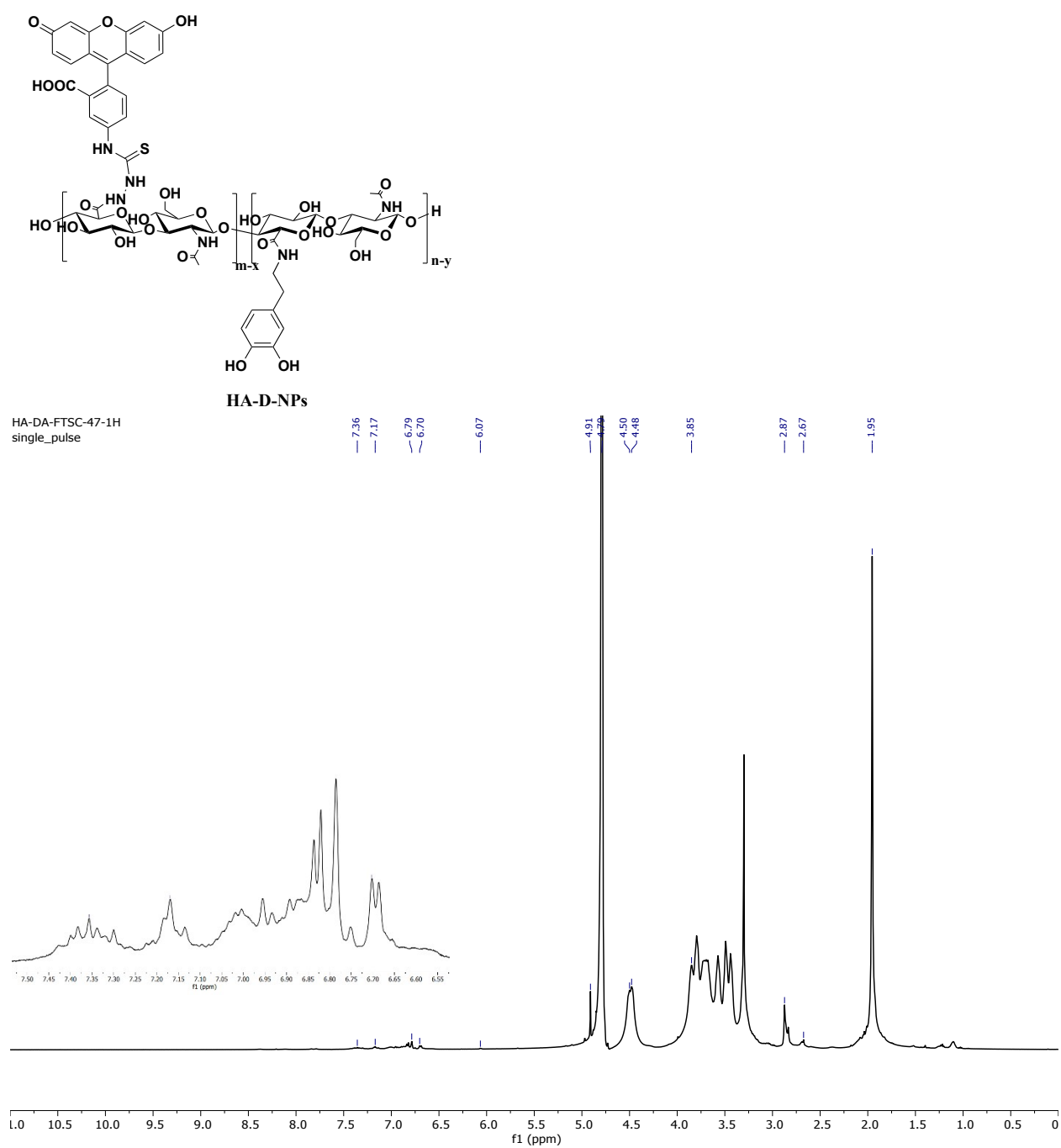


Figure S2: ^1H NMR spectrogram of HA-DA-NPs in D_2O at 25 °C. The aromatic signals do not correlate to the degree of dopamine and fluorescein modification due to self-assembly consistent with our previous reportⁱⁱ

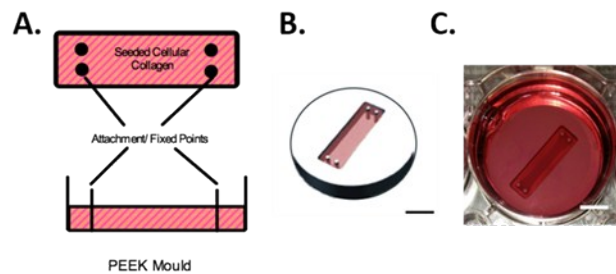


Figure S3: Images of the PEEK Chamber (mould) used for casting the SkM construct. (A). Schematic illustration (B). Rendered computer aided design (CAD) image. (C). Experimental image of PEEK mould containing SkM hydrogel.

ⁱ X. Shuai, H. Ai, N. Nasongkla, S. Kim, J. Gao, J. Controlled Release 2004, 98, 415.

ⁱⁱ O. P. Oommen, J. Garousi, M. Sloff, O. P. Varghese Macromol. Biosci. 2014, 14, 327–333