

Bystroňová et. al.: Creating a 3D Microenvironment for Monocyte Cultivation: ECM-Mimicking Hydrogels Based on Gelatine and Hyaluronic Acid Derivatives - Supplement

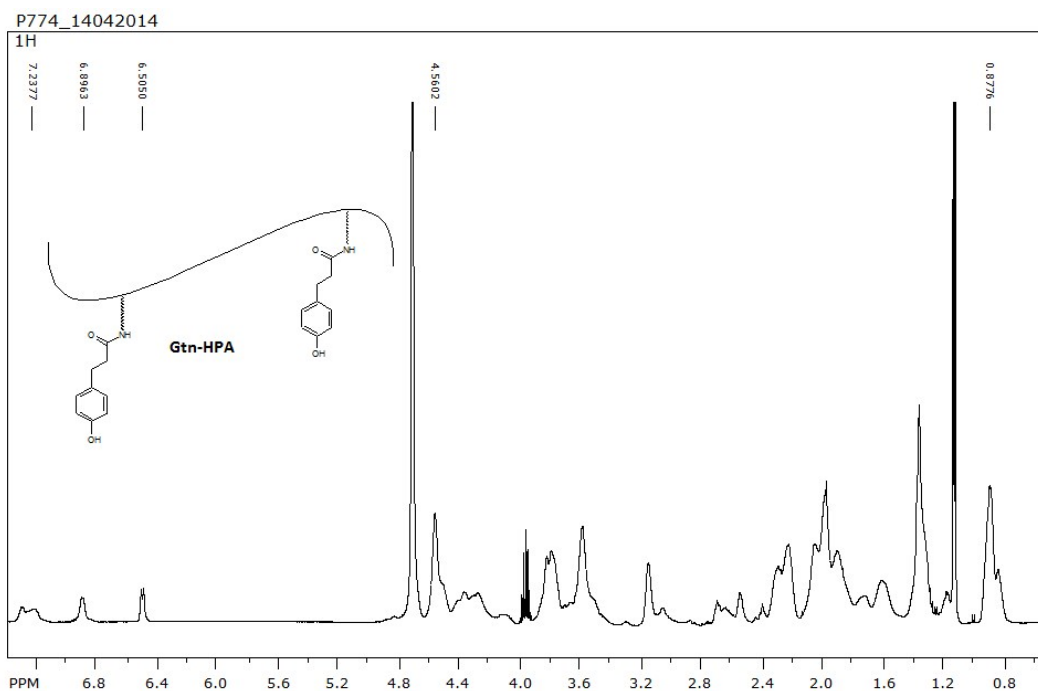


Figure S1: ¹H NMR spectrum of Gtn-HPA Signals assignment - ¹H NMR: (D₂O, ppm) δ:0.88 – 4.56 (Gtn backbone); 6.50 (d, 2 H arom of HPA); 6.90 (s, 2 H arom of HPA); 7.15 – 7.35 (aromatic acid residues of Gtn backbone).

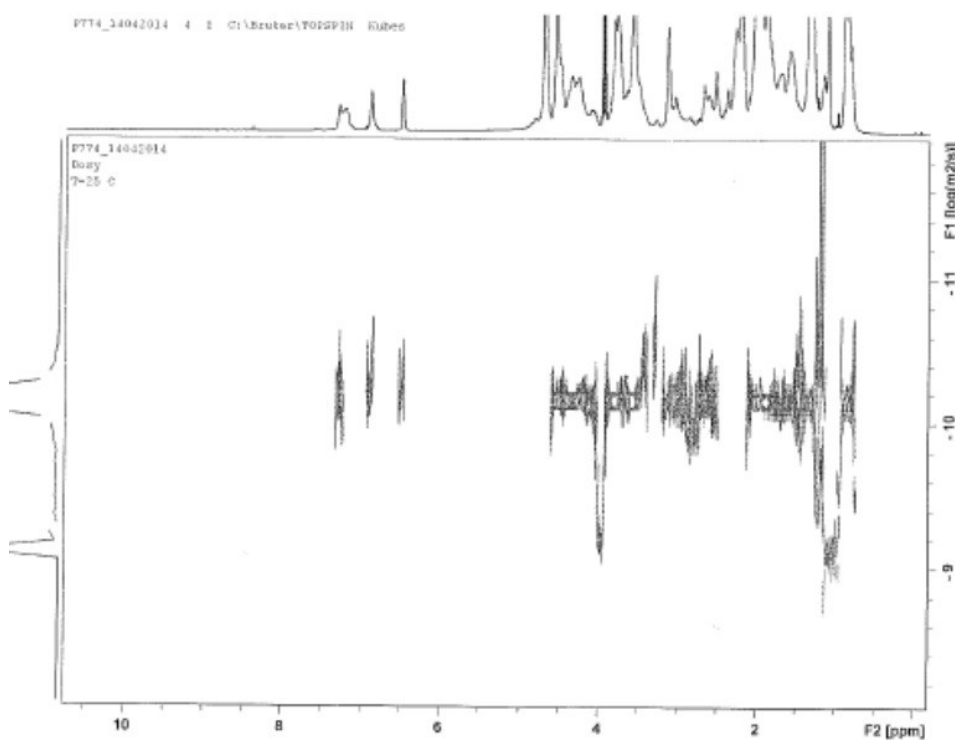


Figure S2: DOSY spectrum of Gtn-HPA

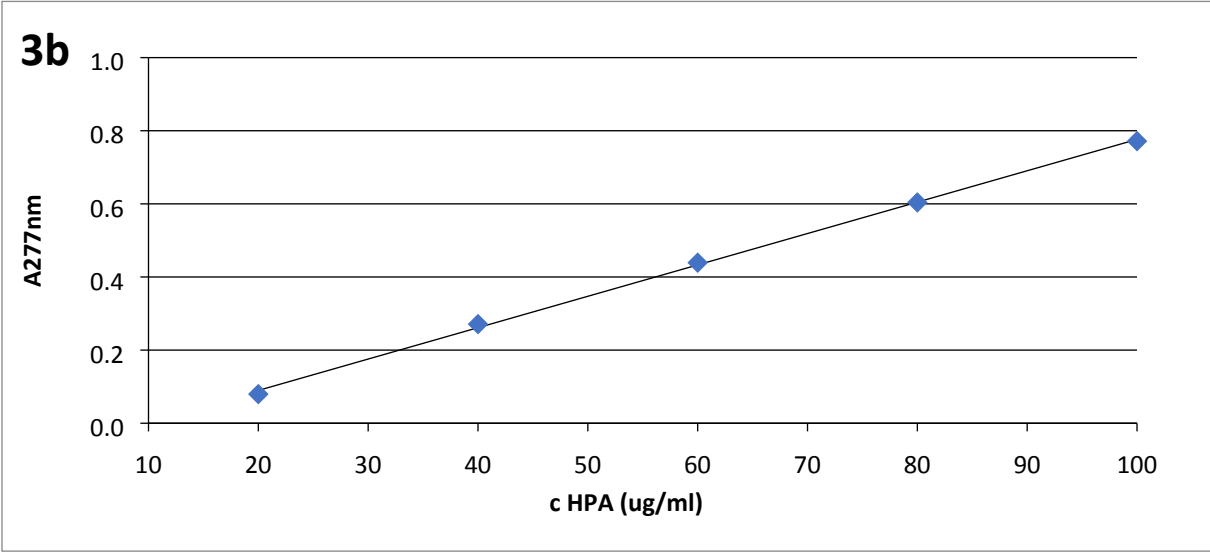
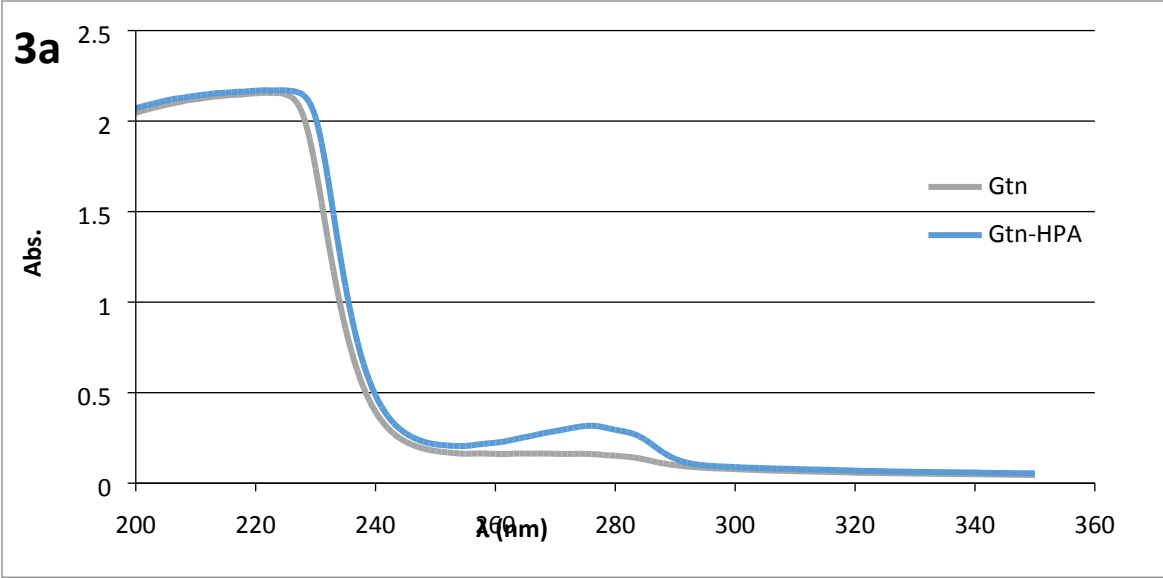


Figure S3: a) UV/VIS spectra of prepared Gtn-HPA conjugate b) calibration curve of HPA in the solution of gelatin (2 mg/ml)

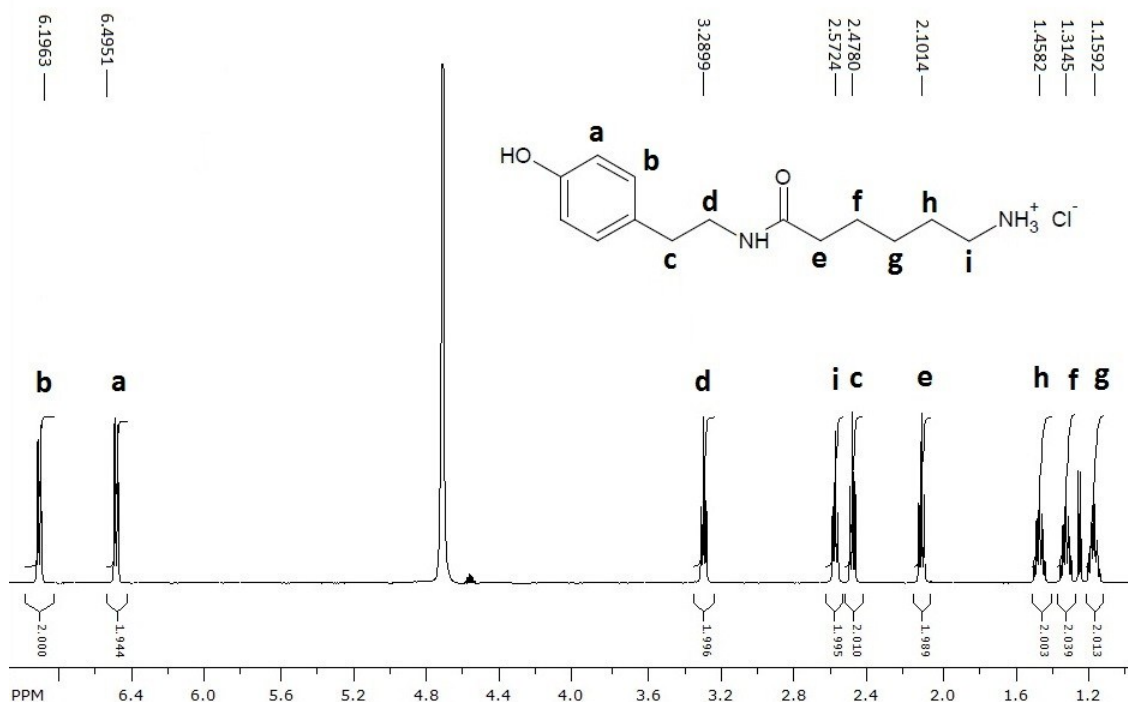


Figure S4: ^1H NMR spectrum of 6-amino-N-[2-(4-hydroxyphenyl)ethyl]hexanamide (Ahx-TA). Signals assignment: ^1H NMR: ($\text{D}_2\text{O}+\text{NaOD}$, ppm) δ : 1.16 (m, 2 H, γ - CH_2 - hexanoic acid); 1.31 (m, 2 H, β - CH_2 - hexanoic acid); 1.46 (m, 2 H, δ - CH_2 -hexanoic acid); 2.10 (t, 2 H, $-\text{CH}_2$ -CO-); 2.48 (t, 2 H, $-\text{CH}_2$ -Ar); 2.78 (t, 2 H, $-\text{CH}_2$ - NH_2); 3.29 (t, 2 H, $-\text{CH}_2$ -NH-CO); 6.50 (d, 2 H, C6-arom); 6.90 (s, 2 H, C4-arom).

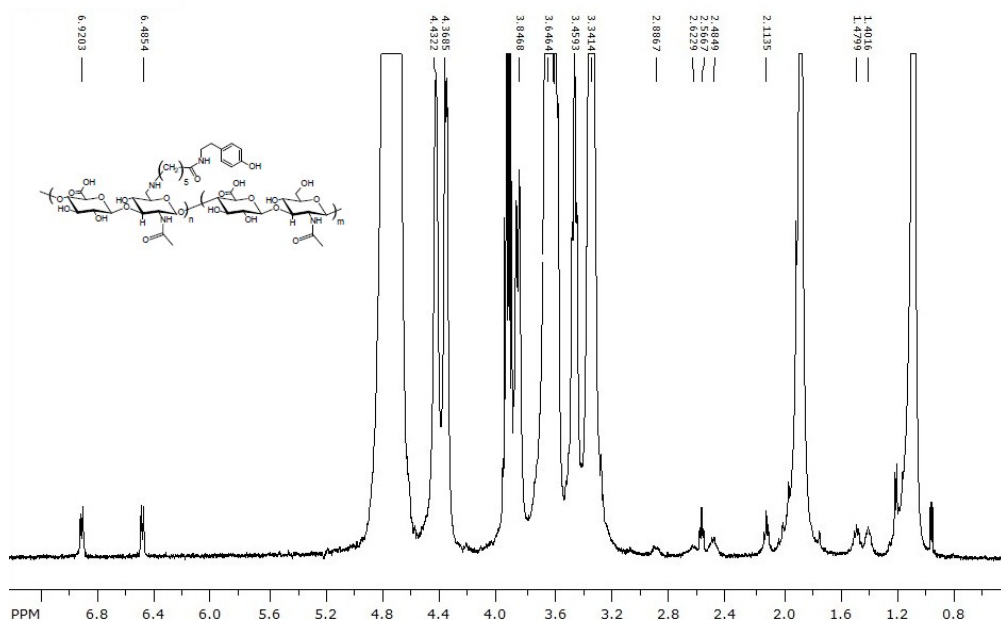


Figure S5: ^1H NMR spectrum of HA-TA Signals assignment: HA- TA ^1H NMR ($\text{D}_2\text{O}+\text{NaOD}$) δ : 1.20 (m, 4 H, γ - CH_2 -hexanoic acid); 1.33 - 1.40 (m, 4 H, β - CH_2 -hexanoic acid); 1.46 (m, 4 H, δ - CH_2 -hexanoic acid); 2.01 (s, 3 H, CH_3 -CO), 2.11 (t, 2 H, $-\text{CH}_2$ -CO-), 2.49 (m, 2 H, $-\text{CH}_2$ -NH-HA), 2.56 (t, 2 H, Ph- CH_2 - CH_2 -), 2.63 and 2.89 (diastereotopic 2H, HA- CH_2 -NH-), 3.27 (t, 2 H, Ph- CH_2 - CH_2 -), 3.37 - 3.86 (m, 10 H, hyaluronan body), 4.36 (s, 1H, anomer O- $\text{CH}(\text{OH})$ -), 4.43 (s, 1H anomer, O- $\text{CH}(\text{OH})$ -), 6.49 (d, 2H, arom.), 6.92 (d, 2H, arom.).