Electronic Supplementary Material (ESI) for Biomaterials Science.

Supplementary Information

Lipid sulfoxide polymers as potential inhalable drug delivery platforms with differential albumin binding affinity

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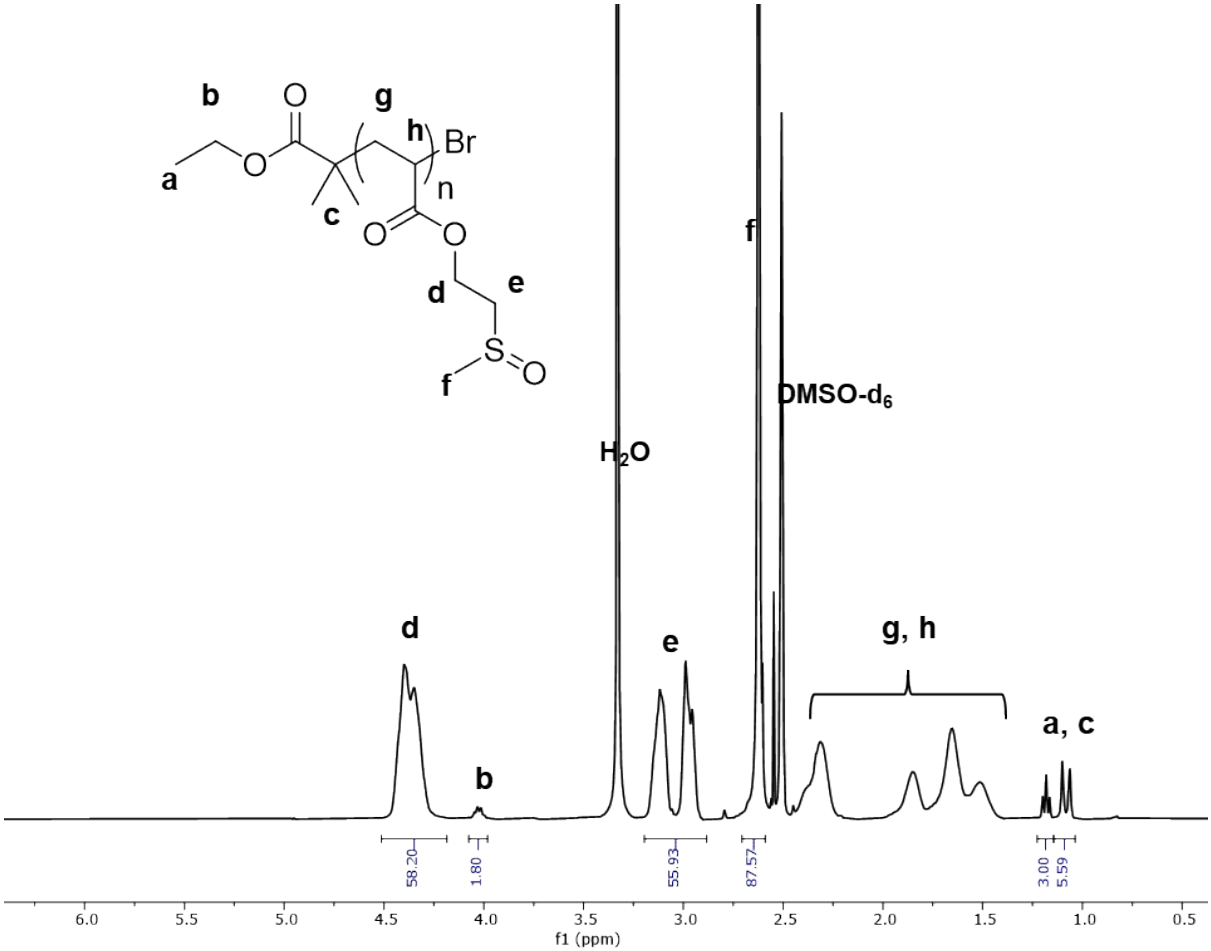

Figure S1: ^{1}H NMR (DMSO-d_6) of 1C_2-PMSEA.

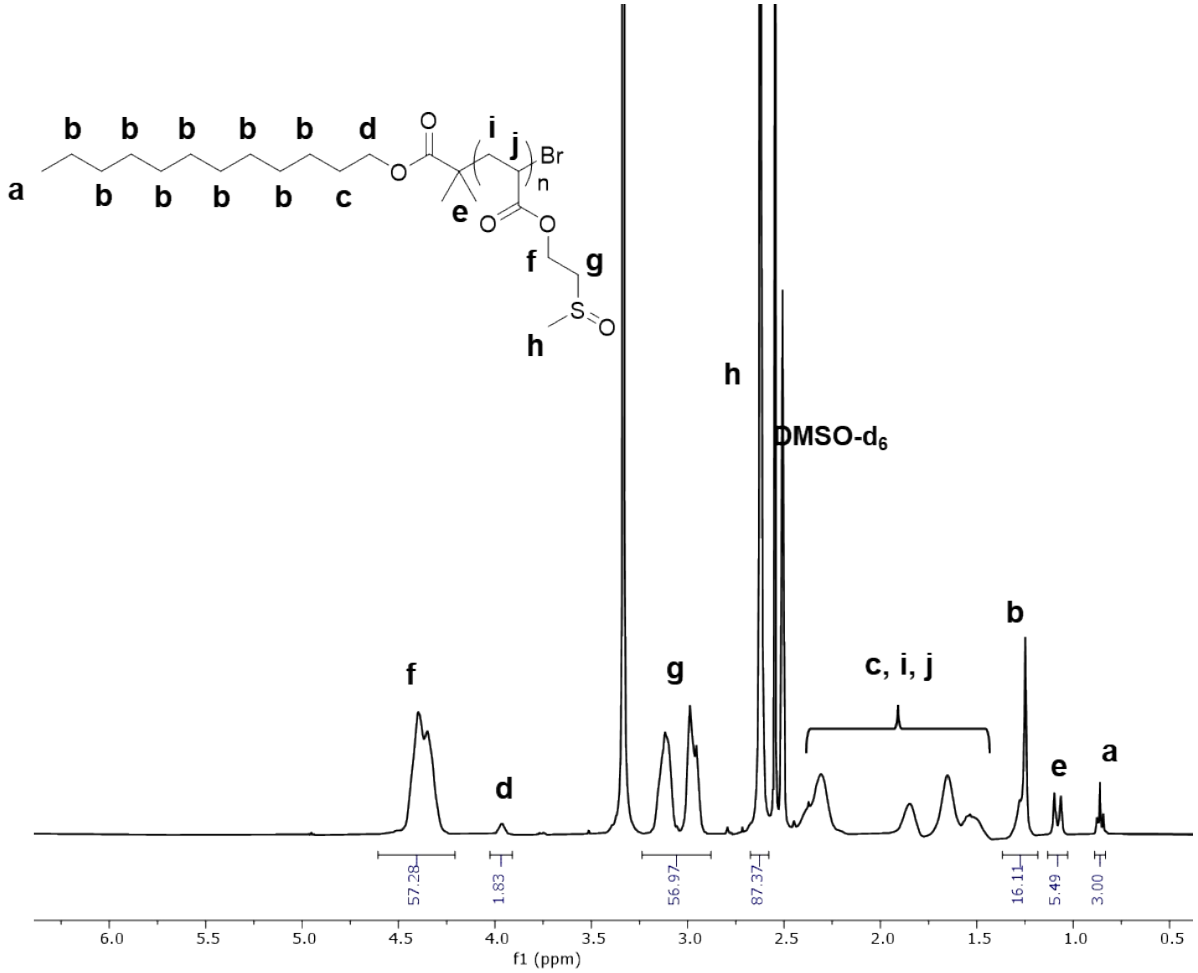

Figure S2: ^{1}H NMR (DMSO-d_6) of 1C_{12}-PMSEA.

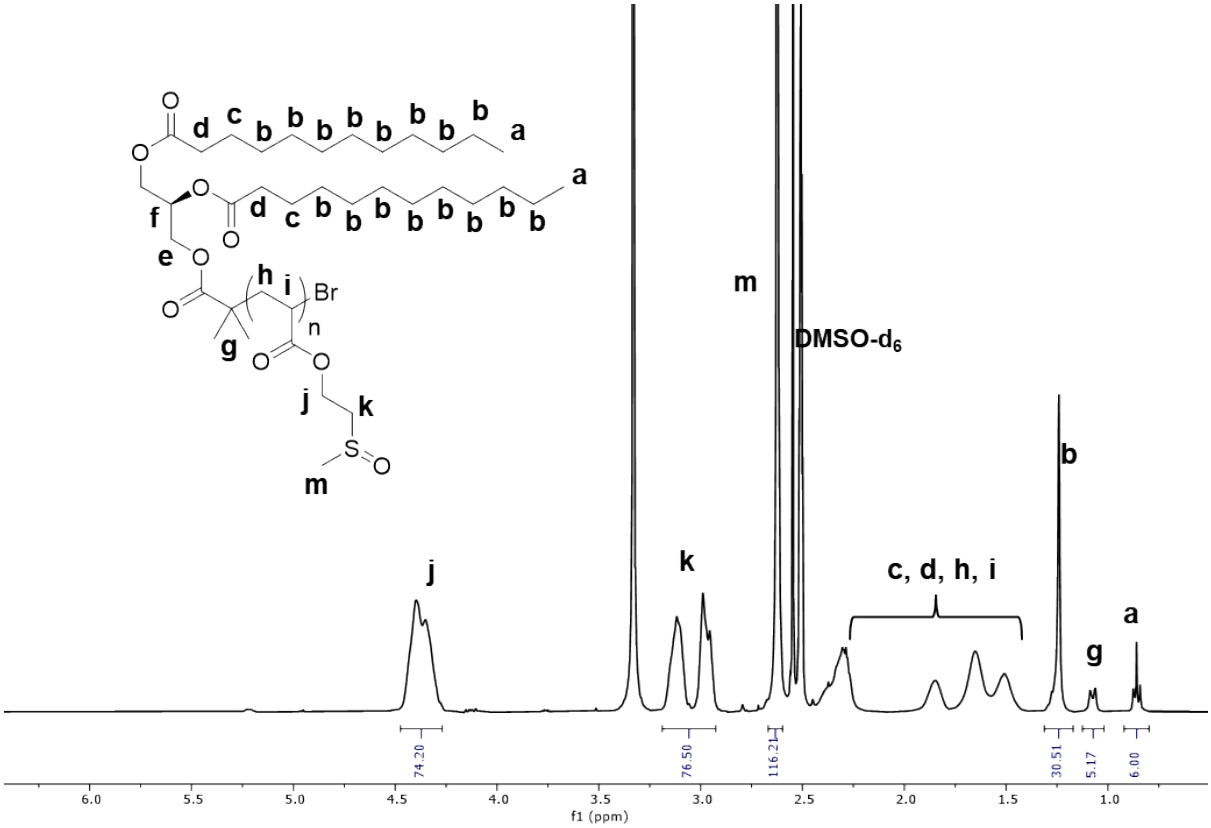

Figure S3: ^{1}H NMR (DMSO-d_6) of 2C_{12}-PMSEA.

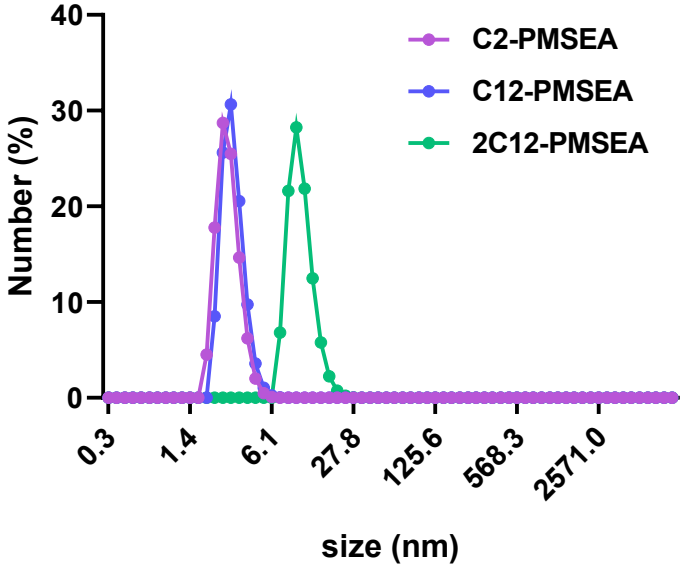

Figure S4: Hydrodynamic size of 1C_2-PMSEA, 1C_{12}-PMSEA and 2C_{12}-PMSEA from DLS.

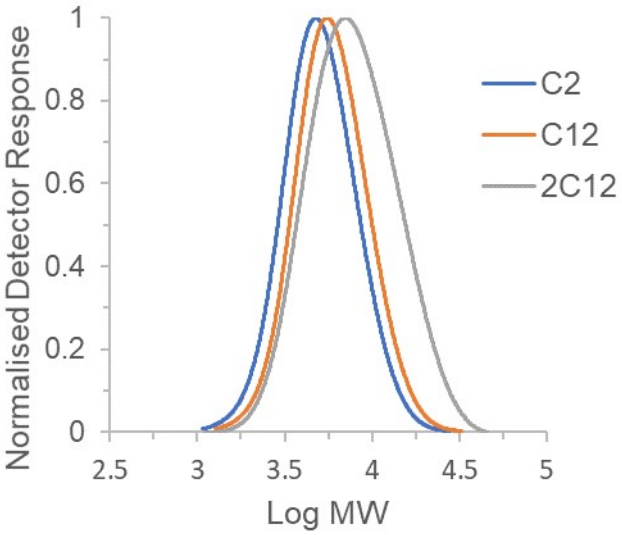

Figure S5: GPC analysis of polymer molecular weight

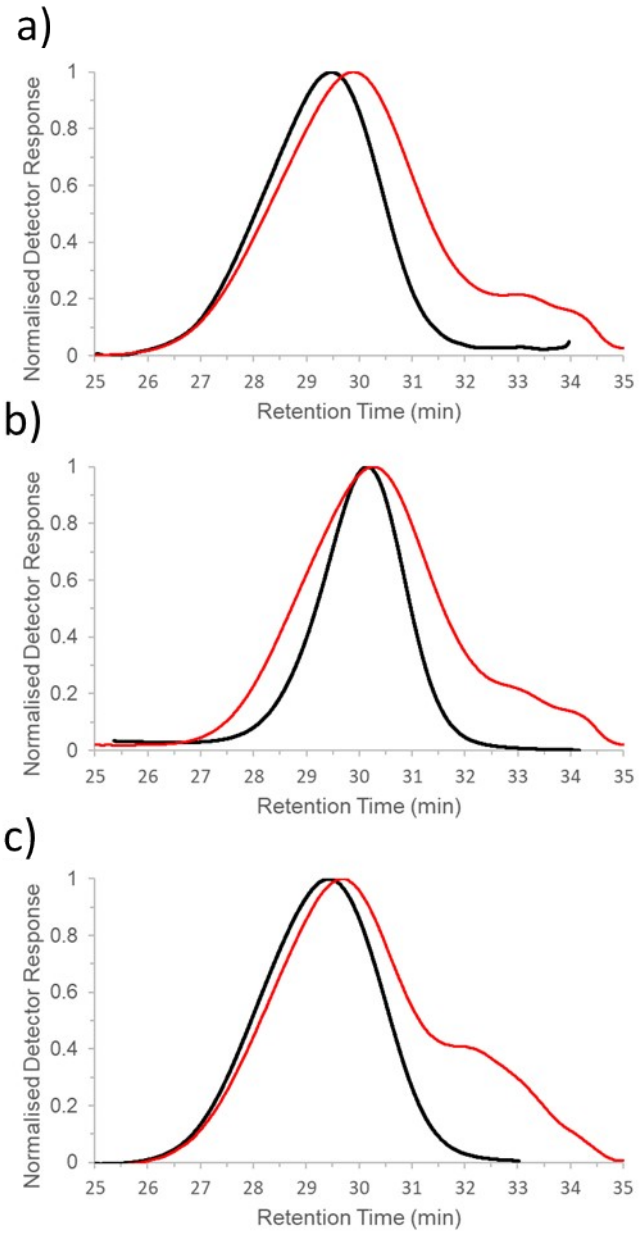

Figure S6: GPC chromatograms using refractive index (RI, black lines) and UV-vis (λ=646nm, red lines) detectors for a) $1C_2$-PMSEA(Cy5), b) $1C_{12}$-PMSEA(Cy5) and c) $2C_{12}$-PMSEA(Cy5).

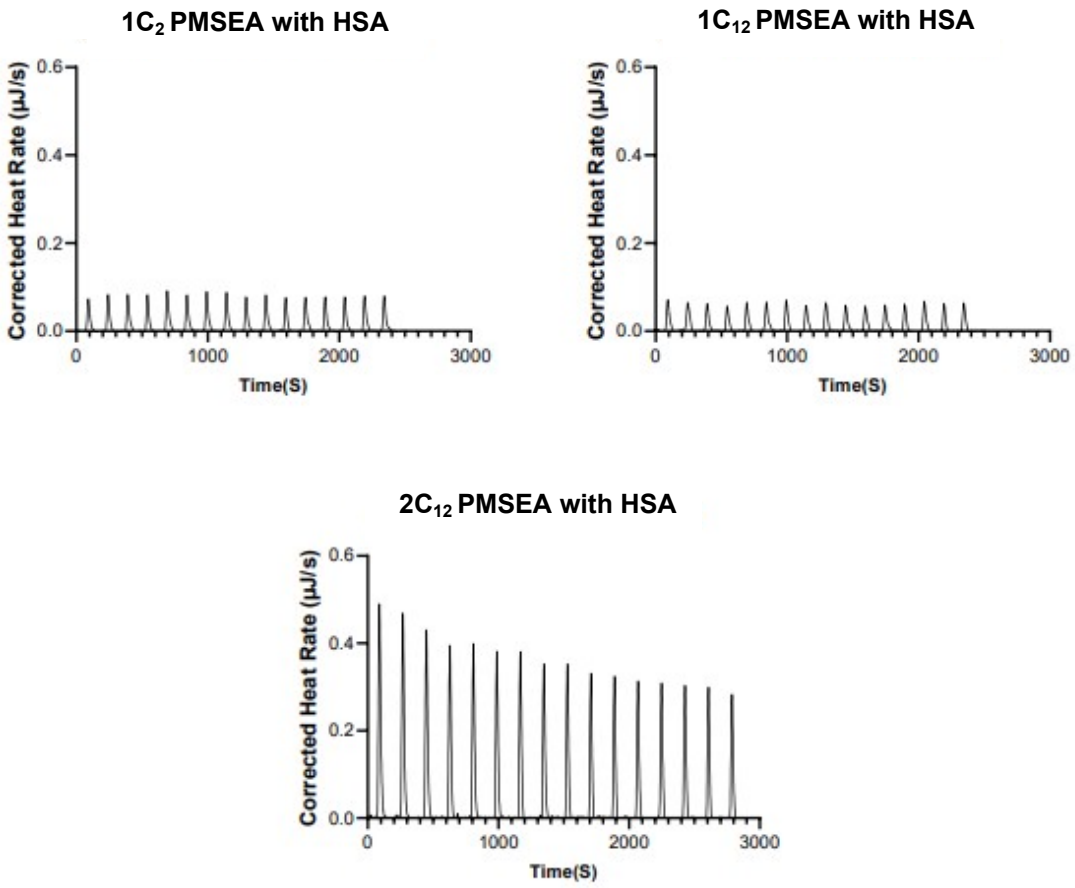

Figure S7: ITC raw traces of PMSEA polymers bind to HSA in PBS at 25 °C.

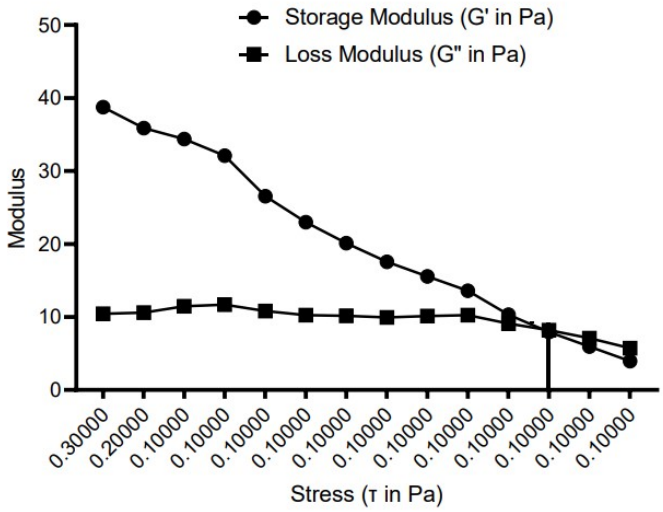

Figure S8 Rheological characterisation of prepared artificial mucus representing storage and loss modulus caused by the stress induced test.