

## Supplementary information

### Sulfobetaine polymers for effective permeability into multicellular tumor spheroids (MCTSs)

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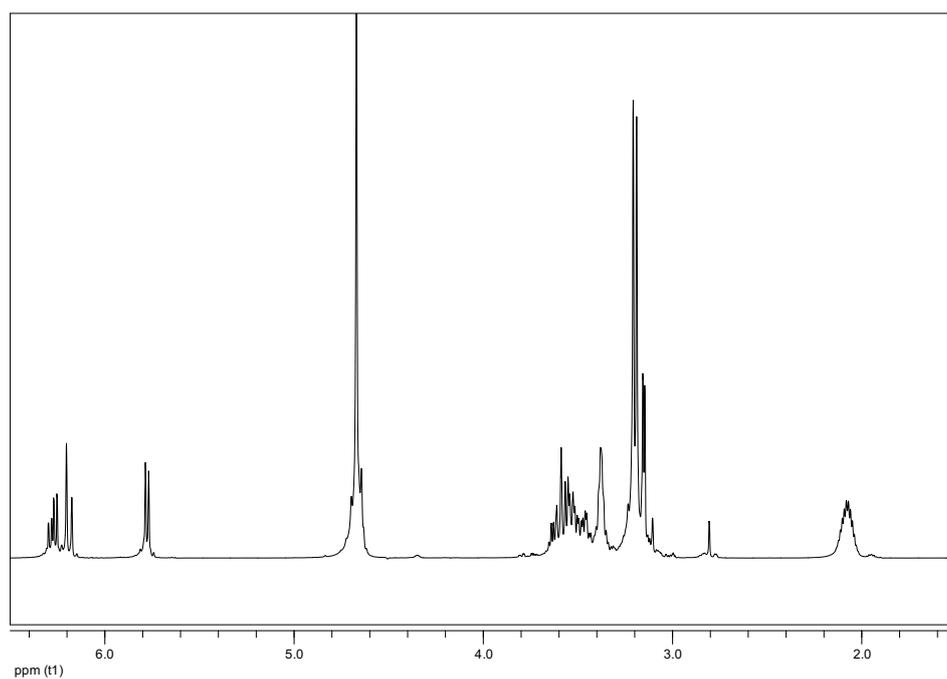
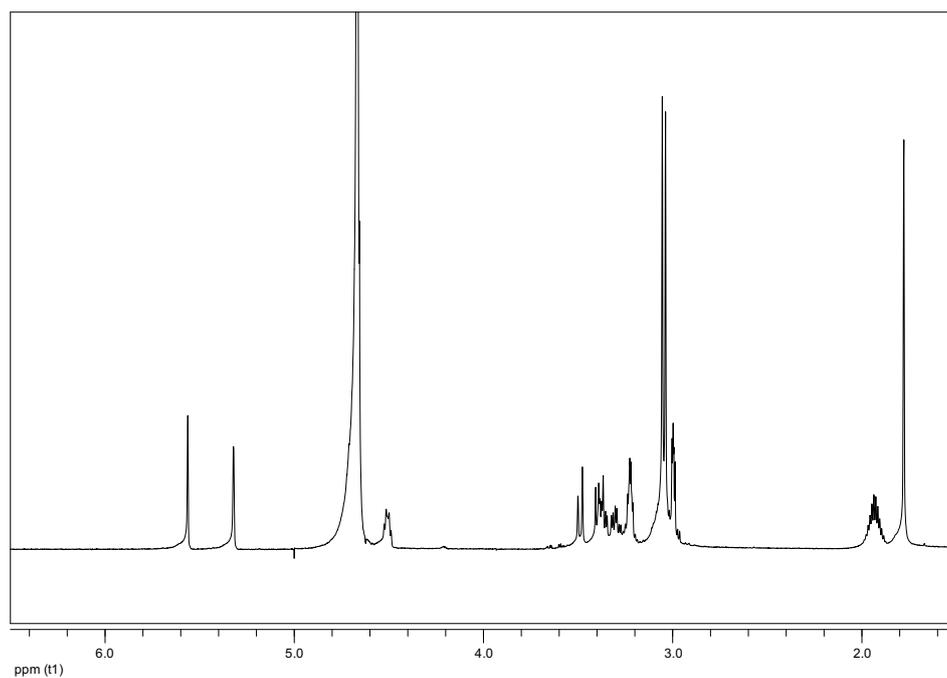
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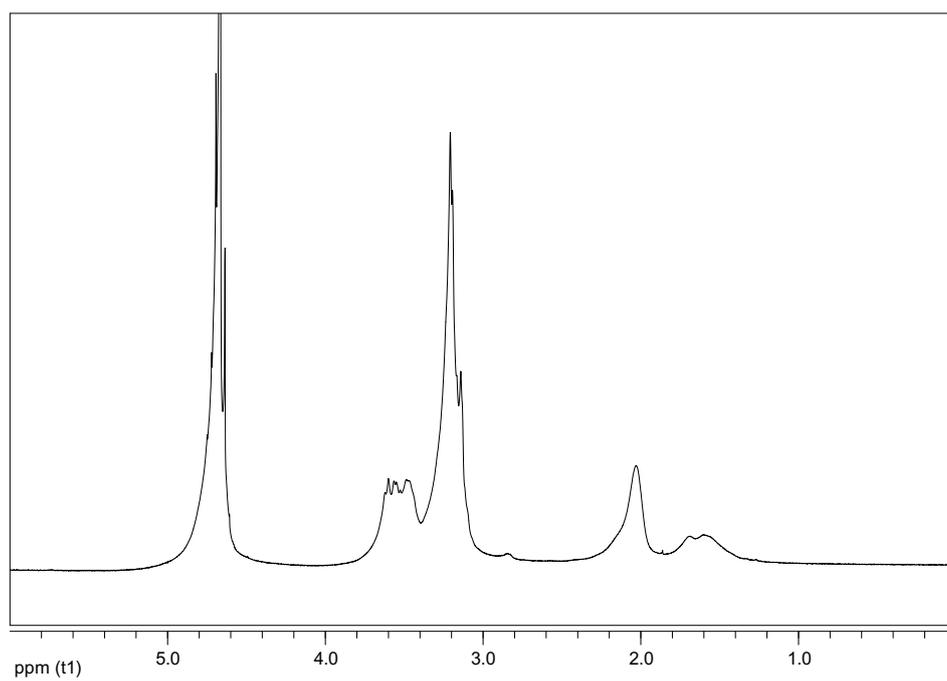
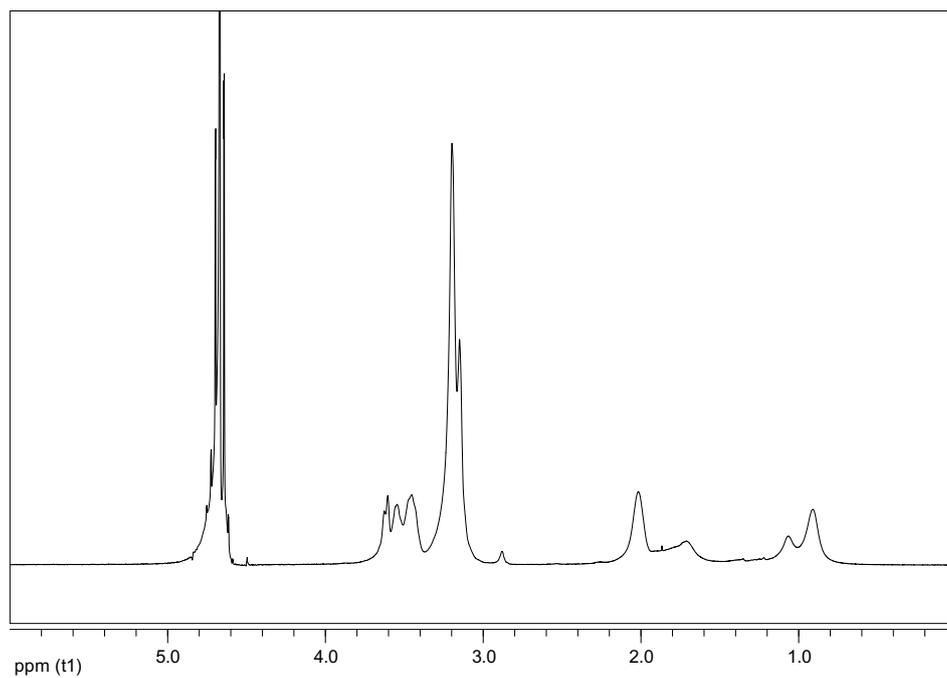
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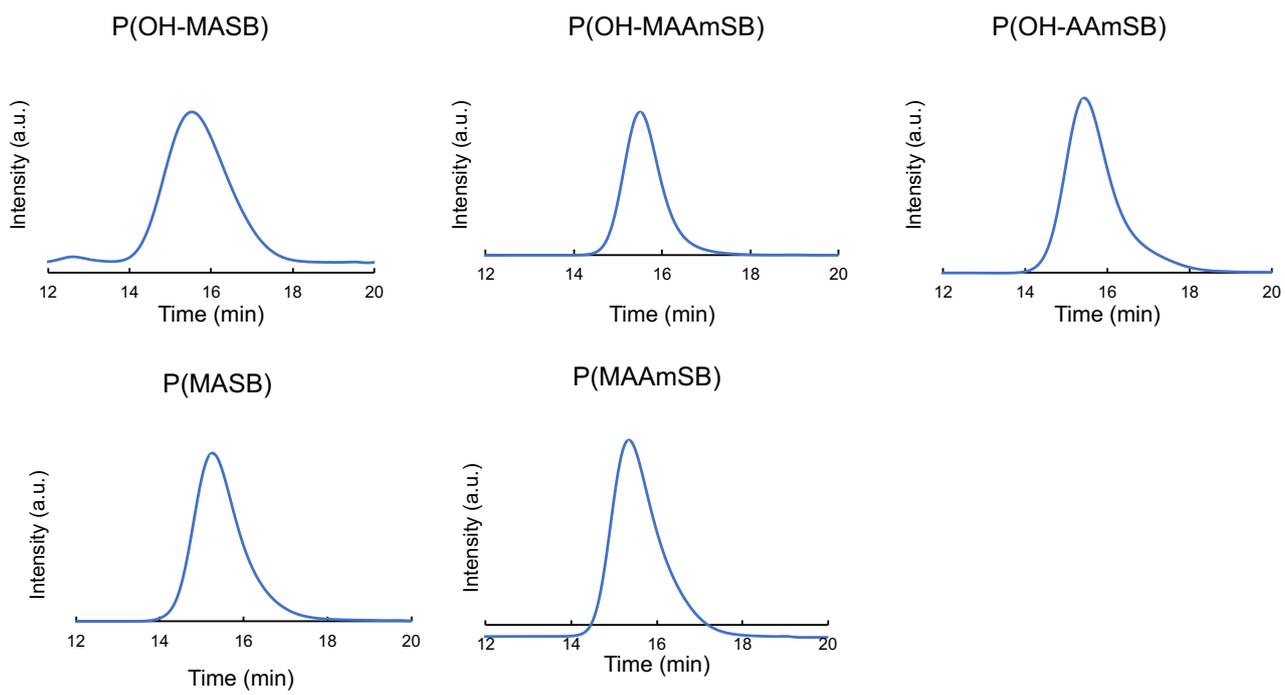
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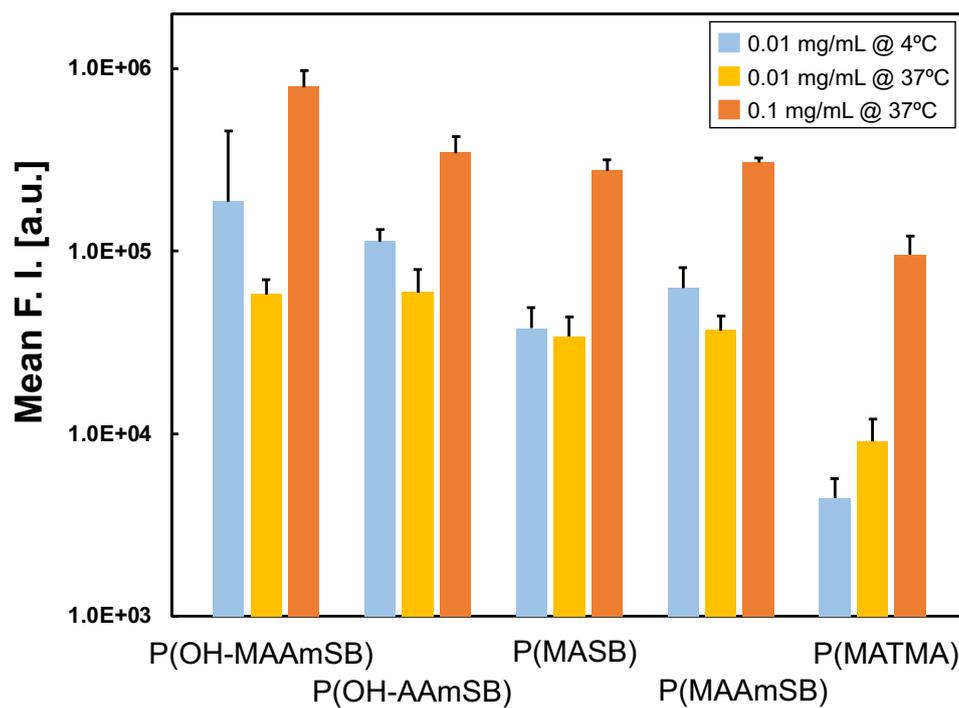
**Figure S1.** <sup>1</sup>H NMR spectra of (top) OH-MAAmSB and (bottom) OH-AAmSB in D<sub>2</sub>O



**Figure S2.** <sup>1</sup>H NMR spectra of (top) P(OH-MAAmSB) and (bottom) P(OH-AAmSB) in D<sub>2</sub>O

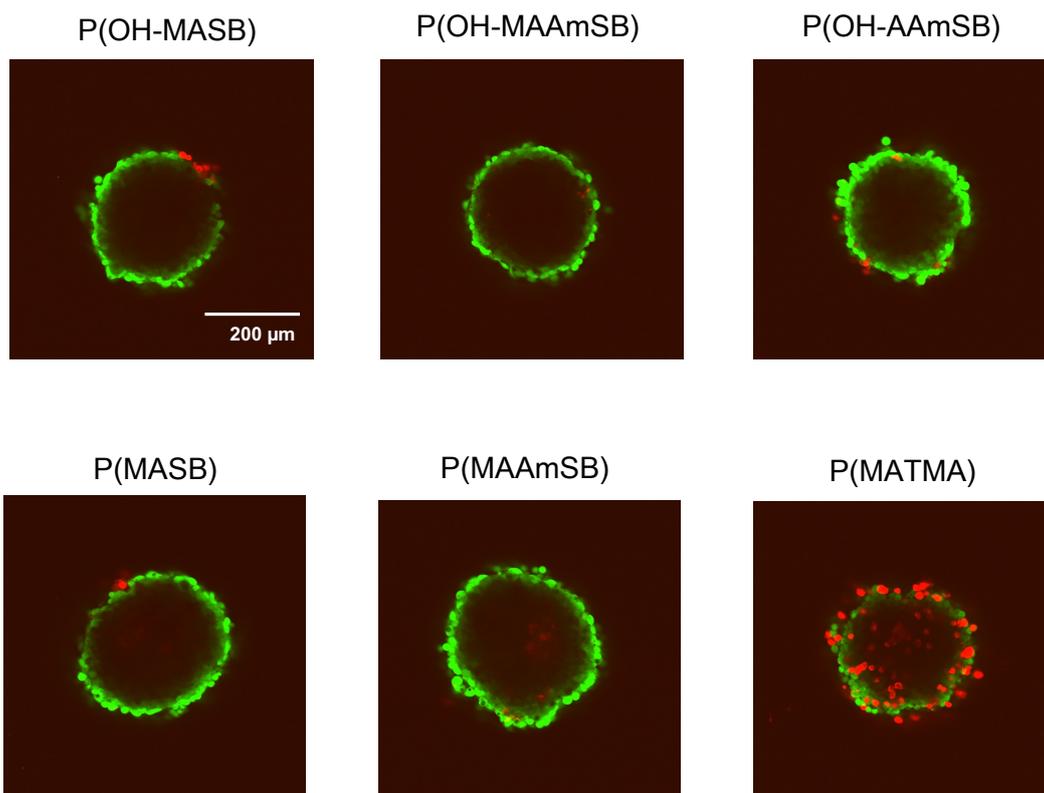


**Figure S3.** Gel permeation chromatograms of sulfobetaine polymers

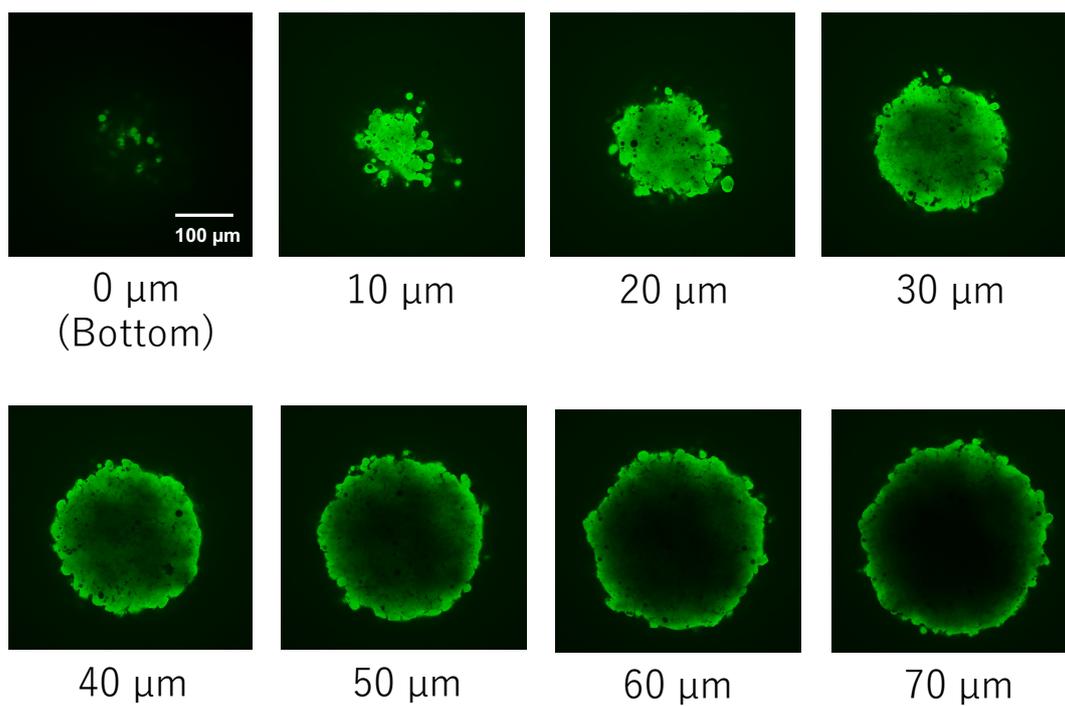


**Figure S4.** Flow cytometry measurements of fluorescein labeled polymers in monolayer cultured

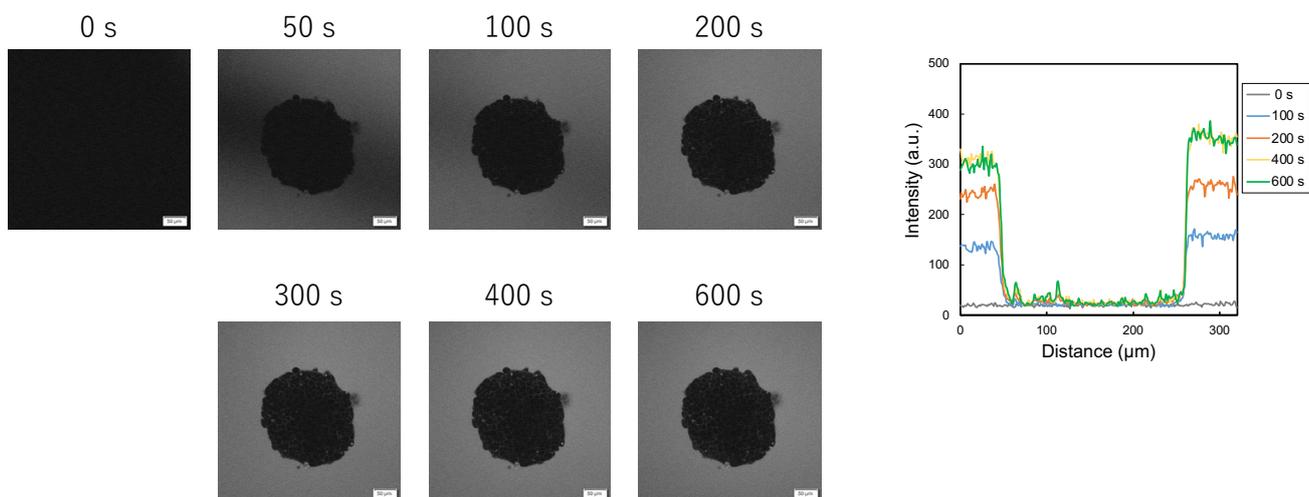
HepG2 cells after 10 min incubation at each condition.



**Figure S5.** Live-dead cell CLSM imaging of HepG2 spheroids after 24 h co-incubation with polymers (final concentration : 1.0 mg/mL)



**Figure S6.** CLSM Z-series images of HepG2 MCTS after 30 min of P(OH-MAAmSB) addition.



**Figure S7.** (left) Time lapse images and (right) the line profiles of P(MASB-co-PEGMA) added HepG2 MCTS obtained by high performance-CLSM. Gamma correction was applied to the images to improve the visibility.