Supporting Information

Preparation and characterization of a novel pH-sensitive Salecan-g-poly (acrylic acid) hydrogel for controlled release of doxorubicin

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PAA hydrogel preparation

2 mL AA solution (36%, w/v) having 24 mg BAAm was added to a 50 mL threenecked flask and the final volume of the solution was made up to 12 mL with deionized water. Then, 50 mg APS was introduced to this solution and the mixture was kept under magnetic stirring at room temperature in argon atmosphere. After ten minutes, the mixture solution was transferred to a circular glass mold and subsequently the mold was sealed and put into a water bath at 60 °C for 24 h. After polymerization, the PAA hydrogel samples were carefully removed from the mold, cut into small pieces and immersed in deionized water for 1 week by changing the water four times a day in order to remove the residual unreacted monomers and other impurities.

Hydrogels	The content of Salecan in washing medium	The content of Salecan in hydrogel
~~	(mg)	(mg)
SPA1	0.44	99.56
SPA2	0.77	149.23
SPA3	0.84	199.16
SPA4	0.70	149.30
SPA5	0.95	149.05
SPA6	0.92	149.08

 Table S1 The content of Salecan in washing medium and in hydrogel