

Supporting Information:

Oroxylin A-loaded aggregation-induced emission polymeric system greatly increased the antitumor efficacy against squamous cell carcinoma

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Apparatus and Materials.

The reagents and solvents were purchased from TCI (Tokyo, Japan). All other chemicals stated without specific statements were of analytical grade and from TCI. The UV-vis absorption spectra were measured on Shimadzu UV-3600. The fluorescence spectra were measured on Hitachi F-7000. NMR spectra were obtained from Bruker Avance 300 spectrometer with 400 MHz for ¹H NMR and 100 MHz for ¹³C NMR and reported as parts per million (ppm) from the internal standard TMS. Molecular weight was determined by gel permeation chromatography (GPC) with a Waters 244 HPLC pump, and THF was used as solvent relative to polystyrene standards.

Synthesis of the conjugated AIE-active polymer.

M-1 (0.150 g, 0.231 mmol), **M-2** (0.100 g, 0.209 mmol), **M-3** (0.012 g, 0.022 mmol), Pd(PPh₃)₄ (0.028 g, 0.05 e.q.) and NaHCO₃ (2.100 g, 25.000 mmol) were dissolved in 20 mL of THF and 15 mL of water and refluxed for 10 h under an Ar atmosphere. Then, **M-4** (0.462 g, 0.40 e.q.) was added followed by refluxing for another 12 h. The reaction mixture was cooled to room temperature, and the organic layer was separated. To the organic layer was added 30 mL of CH₂Cl₂, followed by washing 3 times with water (50 mL) and drying with Na₂SO₄. After the solvent was removed, the reaction mixture was dissolved in 1 mL of CH₂Cl₂. The solution was dropped into 100 mL of hexane, stirred for another 30 min and filtered to obtain the conjugated polymer as a yellow solid (0.182 g). ¹H NMR (400 MHz, CDCl₃) δ 7.82 - 7.60 (m, 5H), 7.57 - 7.44 (m, 9H), 7.23 - 7.03 (m, 9H), 3.66 (s, 78H), 3.38 (s, 0.3H), 1.99 - 0.97 (m, 6H), 1.44 - 0.92 (m, 19H), 0.81 - 0.66 (m, 9H). GPC data: Mw = 7860, Mn = 7540, PDI = 1.04.

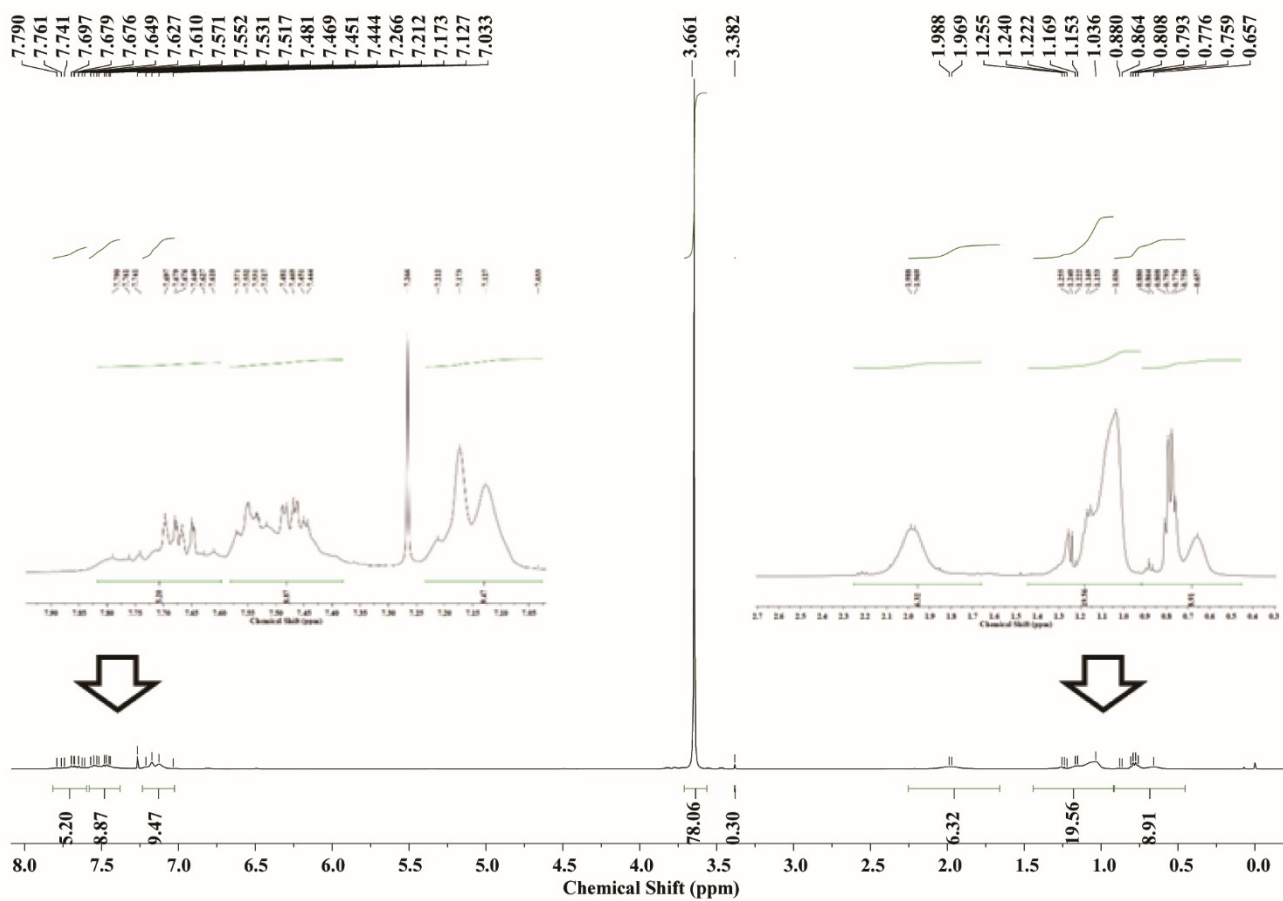


Figure S1. ^1H NMR of conjugated polymer

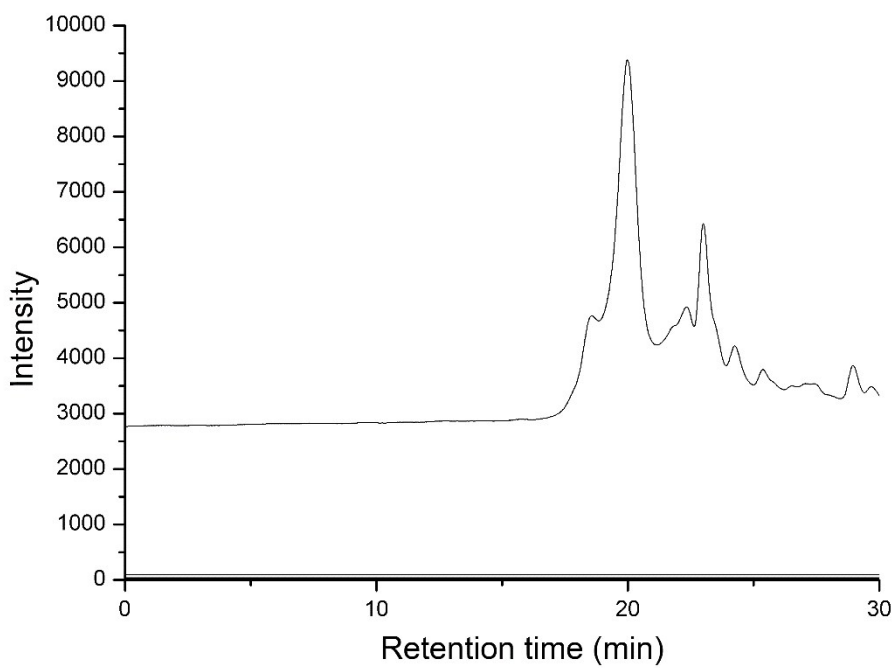


Figure S2. GPC data

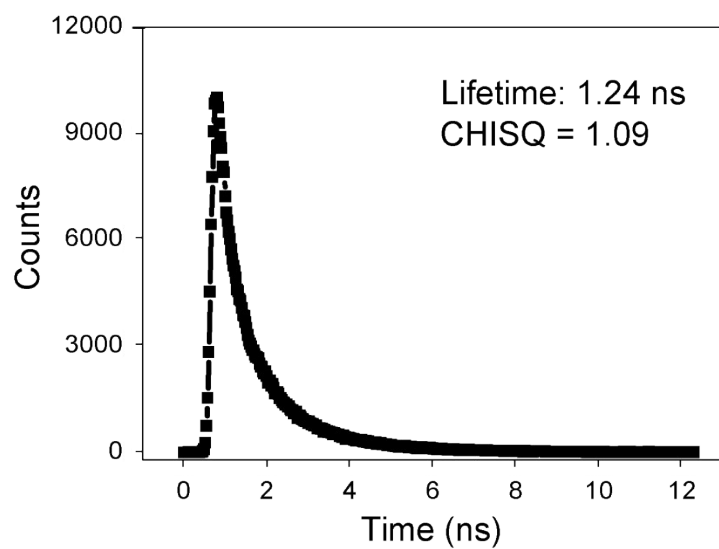


Figure S3. The fluorescence lifetime of conjugated polymer in $f_w = 99\%$ solution, $\lambda_{\text{ex}} = 374$ nm. Polymer concentration: 50 ppm.