## Figure S1

***A***

Retinoic acid-Linoleyl alcohol conjugates



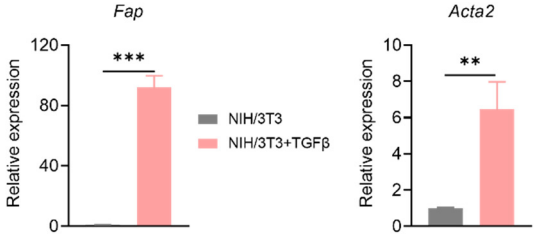

***B***

OncoFAP-Linoleyl alcohol conjugates

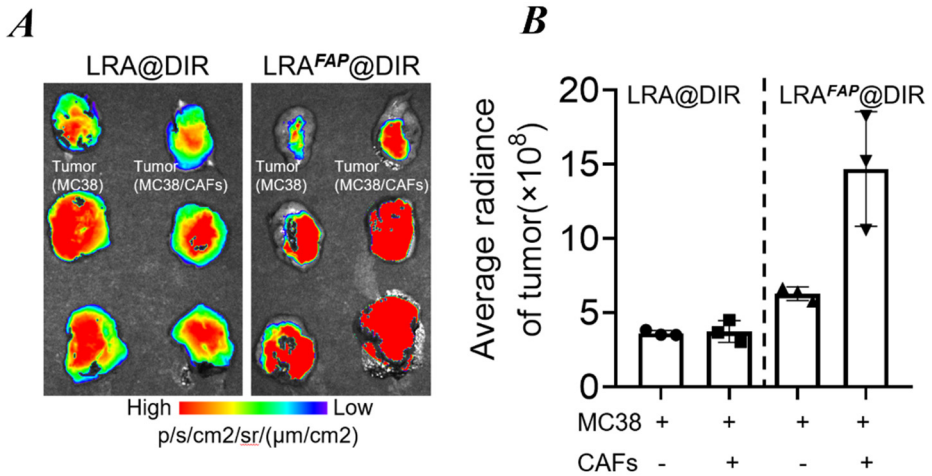



## Figure S2

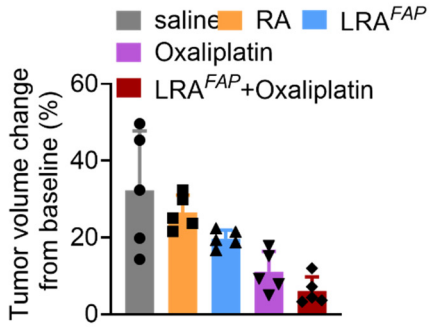
***A***



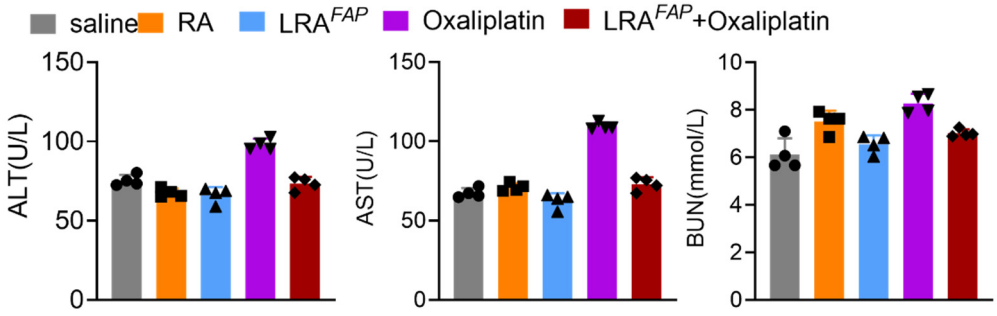
## Figure S3




## Figure S4




## Figure S5




**Supplementary Figure S1. Synthetic routes for RA–linoleyl alcohol and oncoFAP–linoleyl alcohol conjugates.**

(A) Synthesis of the retinoic acid–linoleyl alcohol conjugate (RA–LA) via EDC/DMAP-mediated esterification in anhydrous dichloromethane (DCM). (B) Synthesis of the oncoFAP–linoleyl alcohol conjugate (oncoFAP–LA) via EDC/DMAP-mediated esterification in anhydrous N, N-dimethylformamide (DMF).

**Supplementary Figure S2 | Validation of a TGF-β–induced CAF-like NIH/3T3 model.**

(A) qPCR analysis showed that, relative to untreated NIH/3T3 cells, TGF-β treatment significantly increased the

relative expression of Fap and Acta2 (encoding α-SMA), confirming successful induction of a CAF-like phenotype. Statistical significance is indicated by asterisks $^{**}P < 0.01$, $^{***}P < 0.001$.

**Supplementary Figure S3 | Quantitative analysis of tumour accumulation in bilateral MC38 and MC38/CAF tumours.** (A) Representative fluorescence images of excised MC38 and MC38/CAF tumours collected after intravenous administration of LRA@DiR or LRA^FAP@DiR. (B) Quantitative analysis of average radiance in MC38 and MC38/CAF tumours following intravenous administration of LRA@DiR or LRA^FAP@DiR $^{**}P < 0.01$.

**Supplementary Figure S4 | Percentage change in tumour volume from baseline at study endpoint.**

Percentage change in tumour volume from baseline at study endpoint (tumour volume change from baseline, %).

**Supplementary Figure S5 | Serum biochemistry indices for hepatic and renal toxicity evaluation.** Serum biochemistry indices—alanine aminotransferase (ALT), aspartate aminotransferase (AST) and blood urea nitrogen (BUN)—to evaluate potential hepatic and renal toxicity.