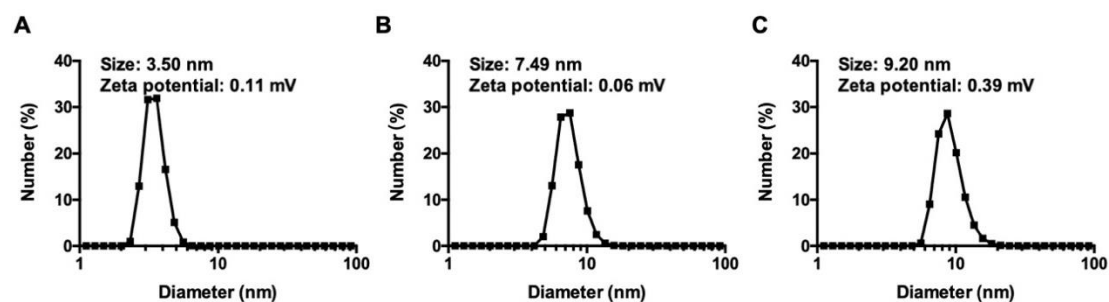
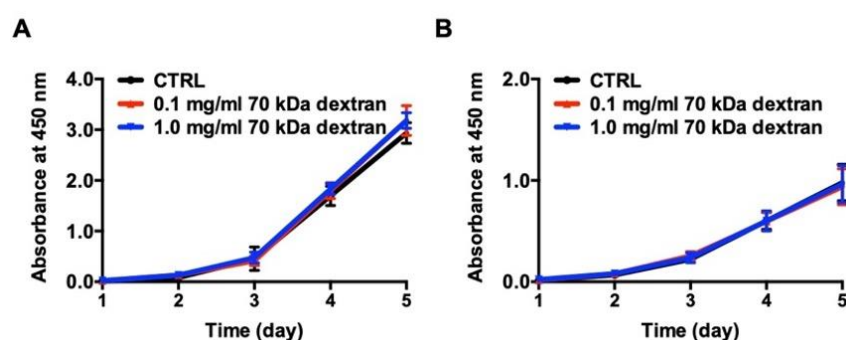


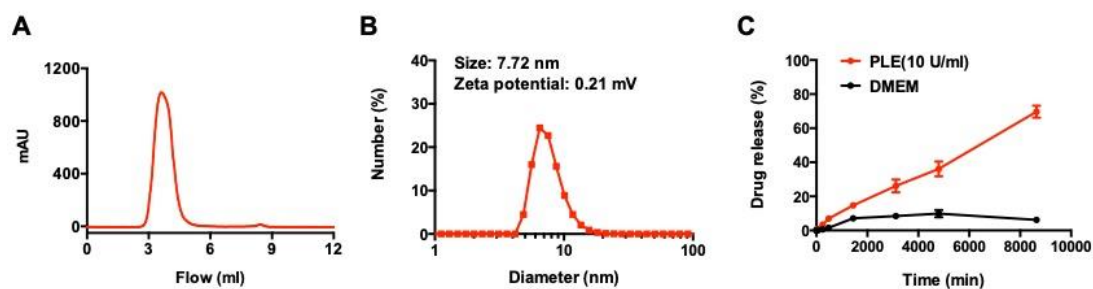
Supplementary Material



Supplementary Figure 1, Size distributions and zeta potentials of the (A) 4 kDa, (B) 70 kDa, and (C) 150 kDa dextrans.



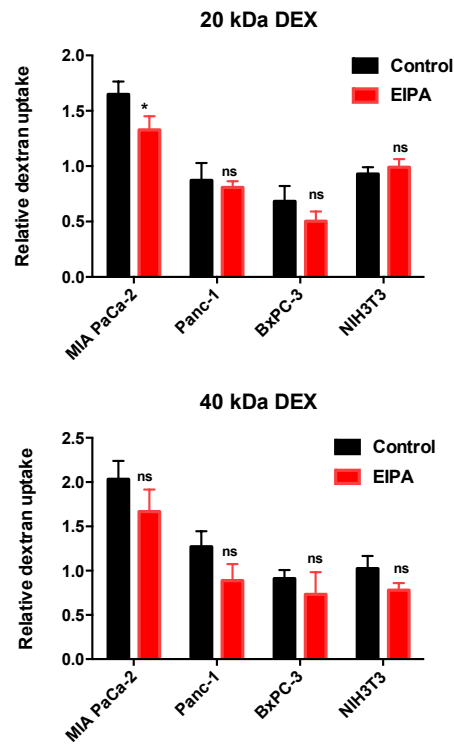
Supplementary Figure 2, Cell growth curves after 70 kDa dextran treatment. Tested cell lines: (A) MIA PaCa-2 and (B) BxPC-3. Error bars indicate the mean and SD, n=6.



Supplementary Figure 3, Characterization of DEX-TP. (A) Desalting of TP succinate. The absorption was measured at 218 nm. (B) Size distribution and zeta potential of DEX-TP. (C) Drug release of DEX-TP in esterase-free DMEM solution (black) and 10 U/mL pig liver esterase (PLE)-containing medium. Error bars indicate the mean and SD, n=3.

Cell line		IC ₅₀ (TP)	IC ₅₀ (DEX-TP)	Deposition efficiency
KRAS mutant cells	MIA PaCa-2	10 nM	170 nM	5.9
	Panc-1	31 nM	389 nM	8.0
KRAS wild-type cells	HEK293T epithelial cells	5 nM	368 nM	1.4
	NIH3T3 fibroblasts	15 nM	7400 nM	0.2
	Jurkat T cells	5 nM	873 nM	0.6
	Raji B cells	8 nM	546 nM	1.5
KRAS manipulation	BxPC-3	12 nM	603 nM	2.0
	BxPC-3 KRAS ^{G12V}	9 nM	123 nM	7.3

Supplementary Figure 4, IC₅₀ values of TP and DEX-TP in different cell lines.



Supplementary Figure 5, Dextran uptake of 20 kDa (up) and 40 kDa (down) with (red) or without (black) 50 μ M EIPA (a macropinocytosis inhibitor) in multiple cell lines. Data are presented relative to the values obtained for NIH3T3 cells without EIPA. KRAS mutant cell (MIA PaCa-2, Panc-1); KRAS wild-type cell (BxPC-3, NIH3T3). Error bars indicate the mean and SD, n=3.