**Table S1.** Hydrodynamic diameters (D<sub>h</sub>) and zeta-potentials of CPIO prepared from different weight ratios of CP and PAAIO.

	D <sub>h</sub> (nm)	Zeta potential	PDI
PAAIO	60.15±0.67	-15.6±2.46	0.26±0.003
CPIO 1:1*	162.07±1.07	23.83±1.24	0.27±0.012
CPIO 2:1*	136.1±1.18	27.73±0.76	0.47±0.099
CPIO 4:1*	113.73±7.4	18.60±2.25	0.41±0.031

\* Different weight ratios of CP:PAAIO in feed.

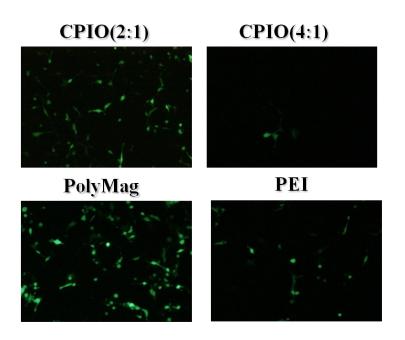


Fig. S1 GFP expression in U87 cells.

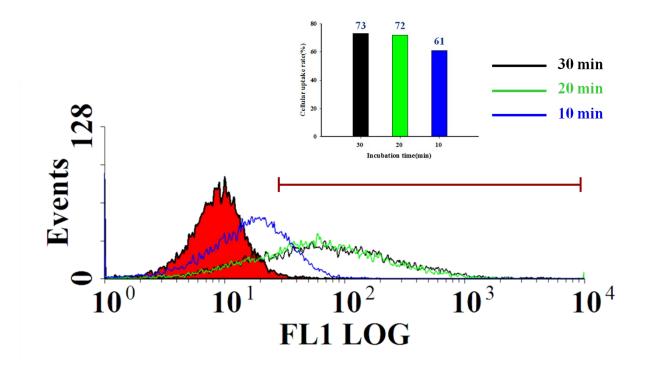
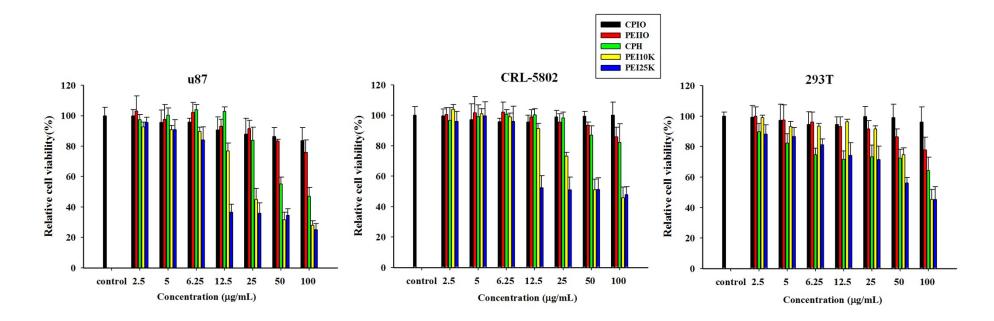
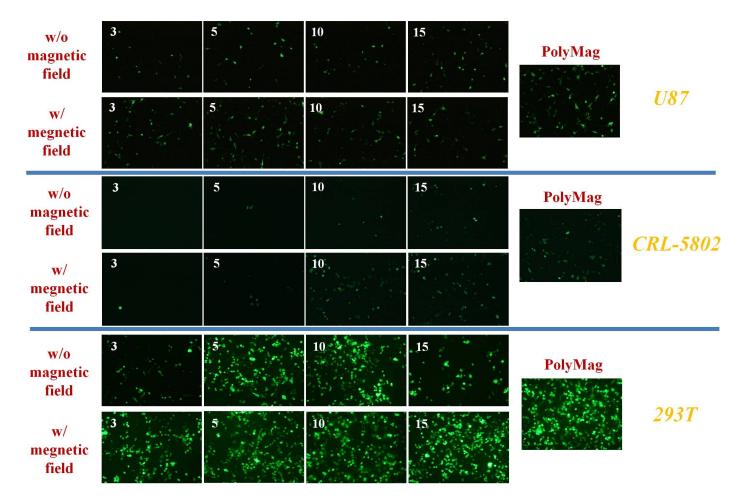


Fig. S2 The internalization of a magnetoplex into U87 cells with an assisted magnetic field for different time periods using flow cytometry. The CPIO/DNA was prepared at w/w=5.



**Fig. S3** Cell viabilities of three cell lines exposed to CPIO (CP coated PAAIO), PEIIO (PEI-25K coated PAAIO), CP with a high content of PEI (CPH), Molecular weight of PEI at 10 Dalton (PEI-10K), and 25 Dalton (PEI-25K).



**Fig. S4** GFP expression in U87, CRL-5802, and 293T cells exposed to CPIO/DNA at various weight ratios with (w) or without (w/o) the magnetic field for 20 mins in the medium containing 10% FBS.