

## Supporting Information

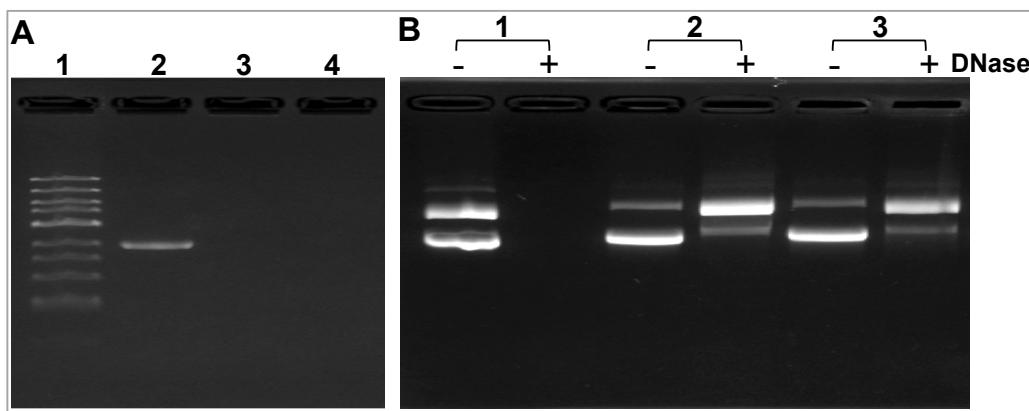
### Poly- $\gamma$ -glutamic acid-based GGT-targeting and surface camouflage strategy for improving cervical cancer gene therapy

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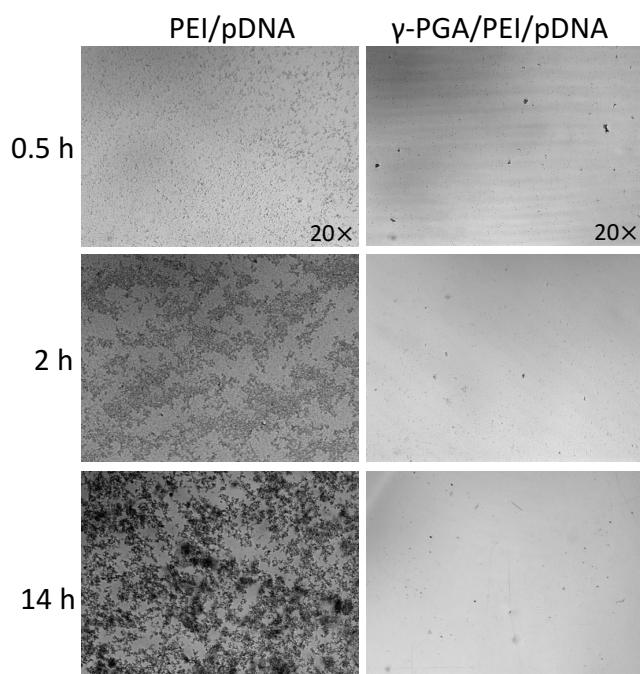
**Table. S1** Physicochemical characteristics of the nanoparticles.<sup>△</sup>

Particle	Size (nm)	$\zeta$ -Potential (mV)	PDI
PEI/pTRAIL	89.3±4.7	37.7±0.8	0.290±0.026
$\gamma$ -PGA/PEI/pTRAIL	116.0±5.3	26.9±1.5	0.145±0.025

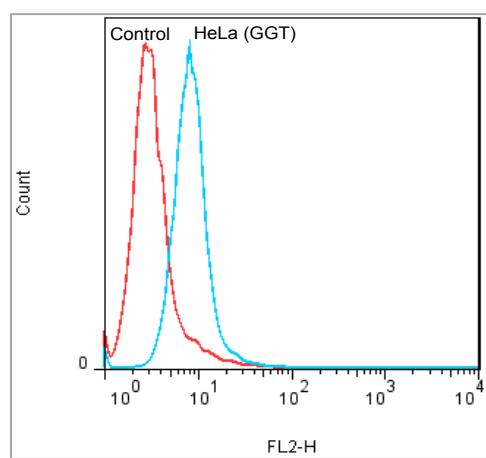
<sup>△</sup>Results are represented as mean ± standard deviation (n=3).



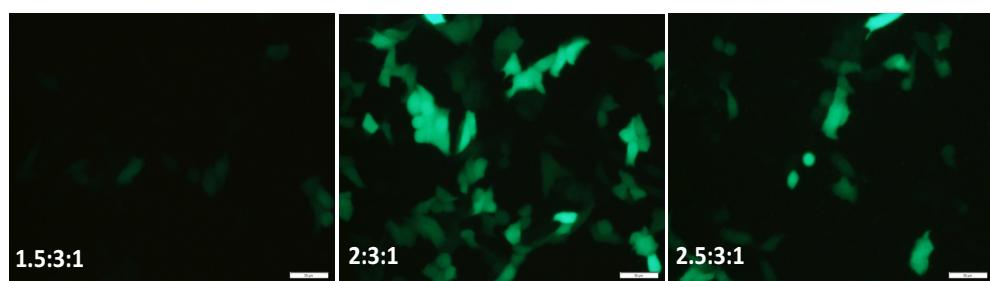
**Fig. S1** Agarose gel electrophoresis. (a) The DNA mobility retardation assay. The lane labels correspond to (1) DNA marker, (2) naked DNA, (3) PEI/pDNA NPs, and (4)  $\gamma$ -PGA/PEI/pDNA NPs. (b) The gel electrophoresis of (1) naked DNA, (2) PEI/pDNA NPs, and (3)  $\gamma$ -PGA/PEI/pDNA NPs, with sequential pretreatment of DNase and heparin.



**Fig. S2** Colloidal stability of  $\gamma$ -PGA/PEI/pDNA NPs in 50% serum (Macroscopic optical imaging).



**Fig. S3** The expression of GGT on HeLa cells.



**Fig. S4** Transfection of  $\gamma$ -PGA/PEI/pDNA with varying ratio ( $W_{\gamma\text{-PGA}}/W_{\text{PEI}}/W_{\text{DNA}}$ ).