

Supporting Information

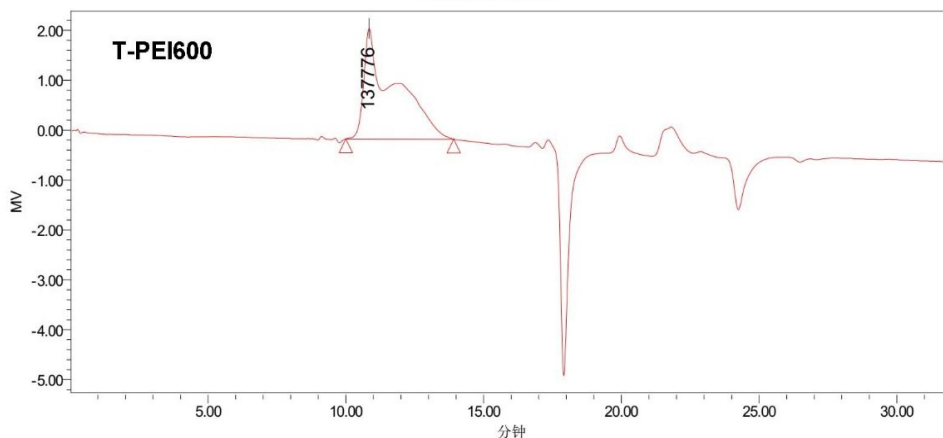
Bioinspired pyrimidine-contained cationic polymers as effective nano-carriers for DNA and protein delivery

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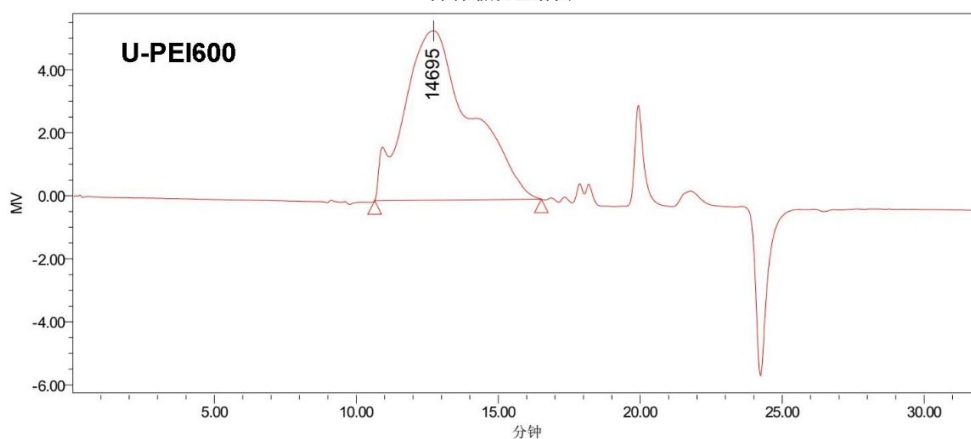
自动缩放色谱图



GPC 结果

分布名	Mn (道尔顿)	Mw (道尔顿)	MP	Mz (道尔顿)	Mz+1 (道尔顿)	多分散性	MW 标记 1 (道尔顿)	MW 标记 2 (道尔顿)
1	34346	74892	137776	126882	168743	2.180528		

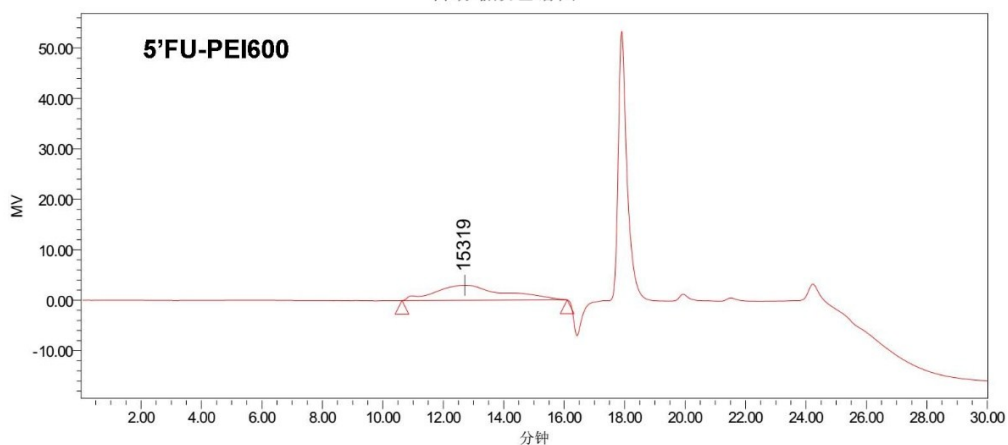
自动缩放色谱图



GPC 结果

分布名	Mn (道尔顿)	Mw (道尔顿)	MP	Mz (道尔顿)	Mz+1 (道尔顿)	多分散性	MW 标记 1 (道尔顿)	MW 标记 2 (道尔顿)
1	7904	21127	14695	52888	89430	2.673100		

自动缩放色谱图



GPC 结果

分布名	Mn (道尔顿)	Mw (道尔顿)	MP	Mz (道尔顿)	Mz+1 (道尔顿)	多分散性	MW 标记 1 (道尔顿)	MW 标记 2 (道尔顿)
1	8052	21343	15319	51450	84830	2.650496		

Fig. S1. GPC results of the studied polymers.

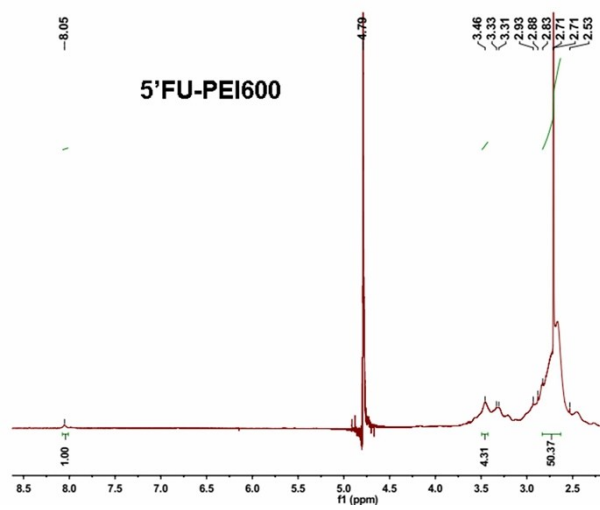
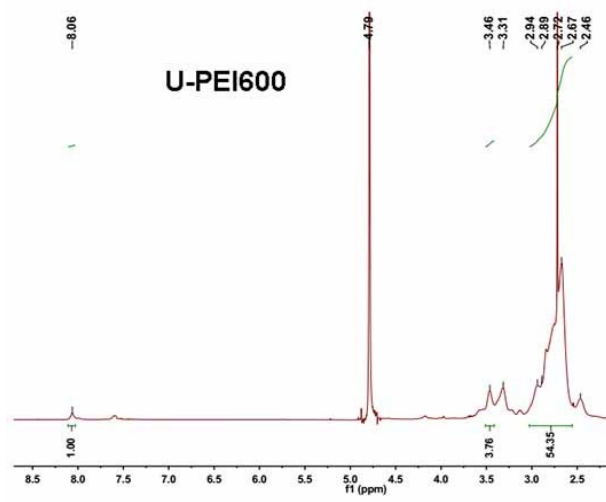
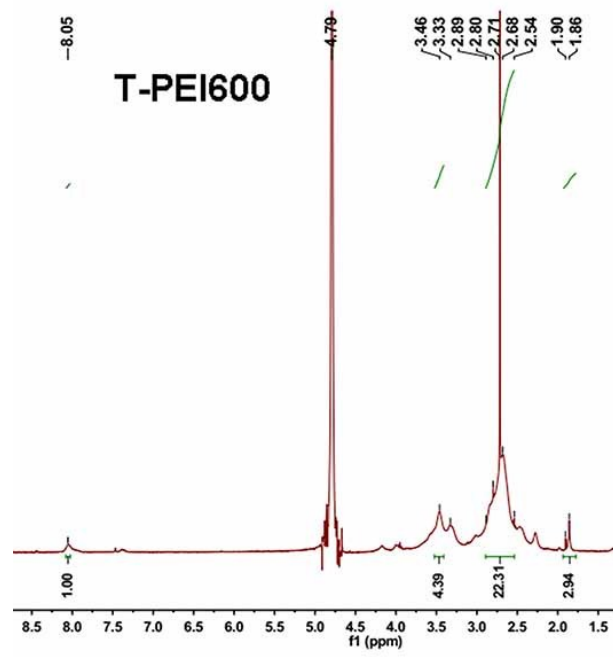
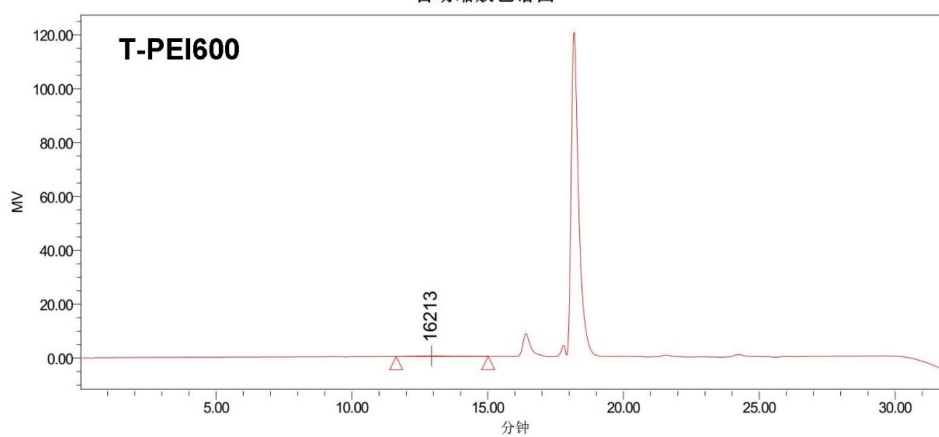


Fig. S2. $^1\text{H-NMR}$ spectra of the polymers.

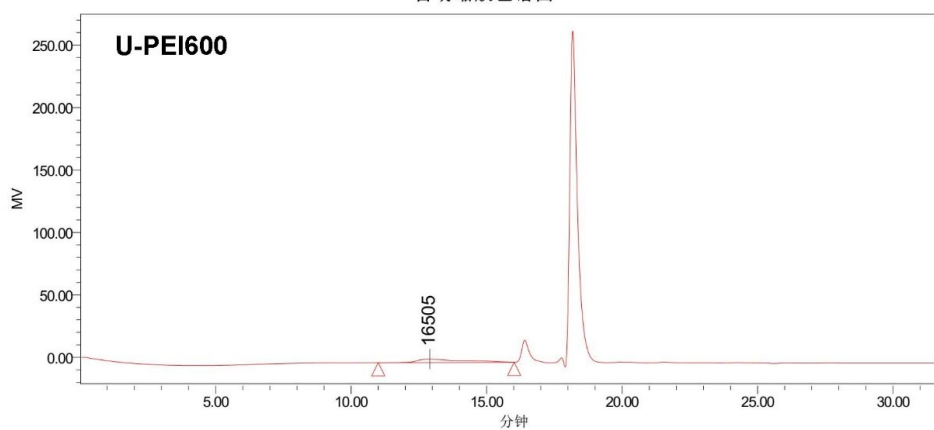
自动缩放色谱图



GPC 结果

分布名	Mn (道尔顿)	Mw (道尔顿)	MP	Mz (道尔顿)	Mz+1 (道尔顿)	多分散性	MW 标记 1 (道尔顿)	MW 标记 2 (道尔顿)
1	12779	15131	16213	16712	17778	1.184077		

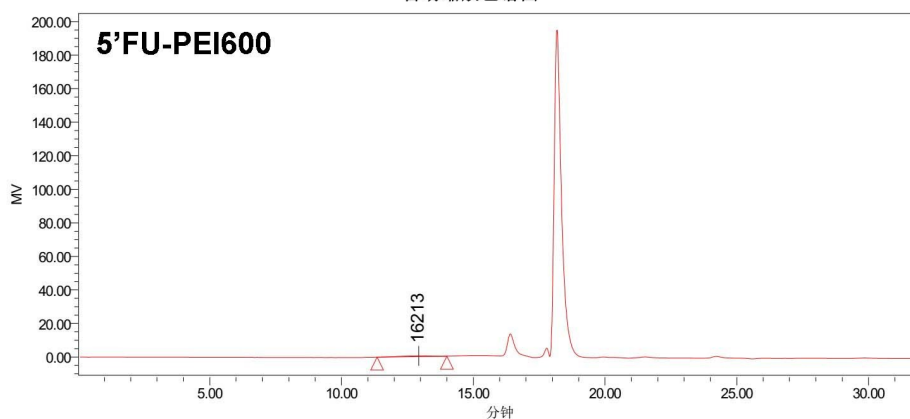
自动缩放色谱图



GPC 结果

分布名	Mn (道尔顿)	Mw (道尔顿)	MP	Mz (道尔顿)	Mz+1 (道尔顿)	多分散性	MW 标记 1 (道尔顿)	MW 标记 2 (道尔顿)
1	6629	1118	16505	14627	16500	1.686684		

自动缩放色谱图



GPC 结果

分布名	Mn (道尔顿)	Mw (道尔顿)	MP	Mz (道尔顿)	Mz+1 (道尔顿)	多分散性	MW 标记 1 (道尔顿)	MW 标记 2 (道尔顿)
1	16793	17665	16213	18415	19038	1.051932		

Fig. S3. GPC results of the studied polymers after incubation in PBS for 24 h.

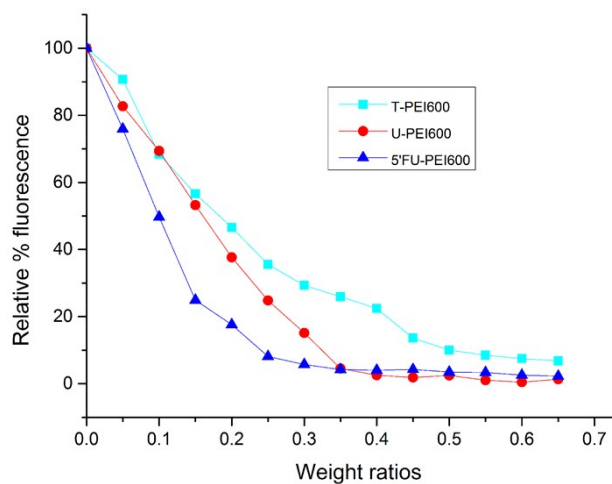


Fig. S4. Fluorescent quenching assay by the addition of polymers to EB / DNA solution.

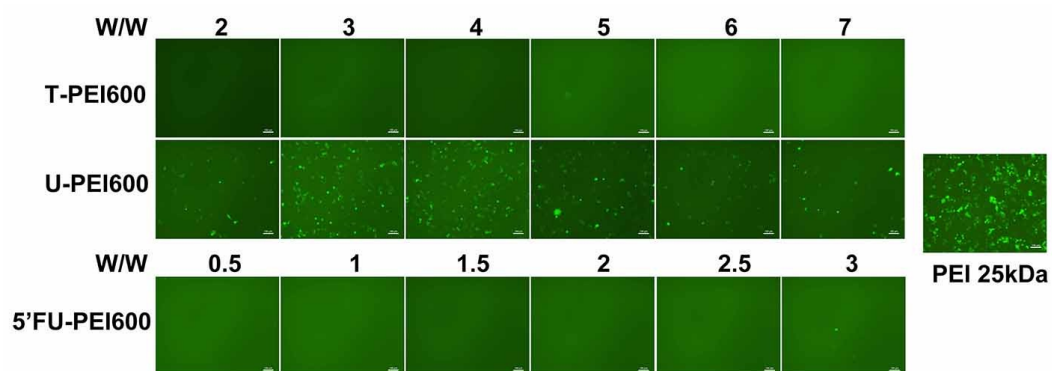


Fig. S5. EGFP gene transfection in HeLa cells. Scar bar is 100 μ m.

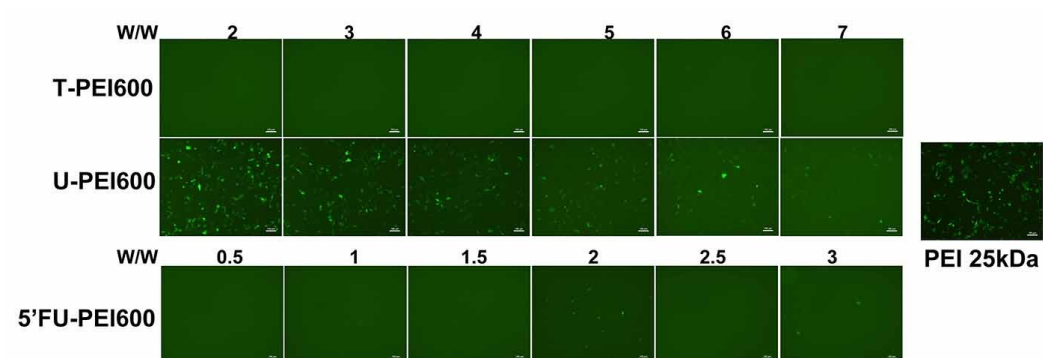


Fig. S6. EGFP gene transfection in 7702 cells. Scar bar is 100 μ m.

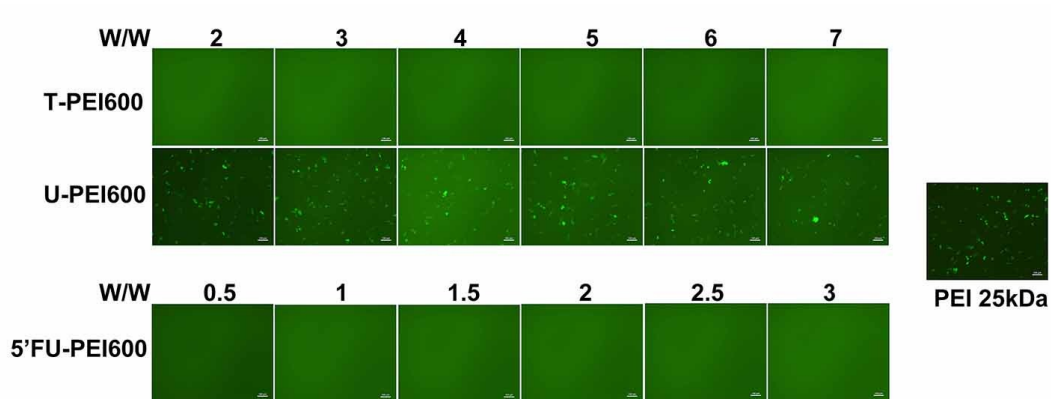


Fig. S7. EGFP gene transfection in HepG2 cells. Scar bar is 100 μ m.

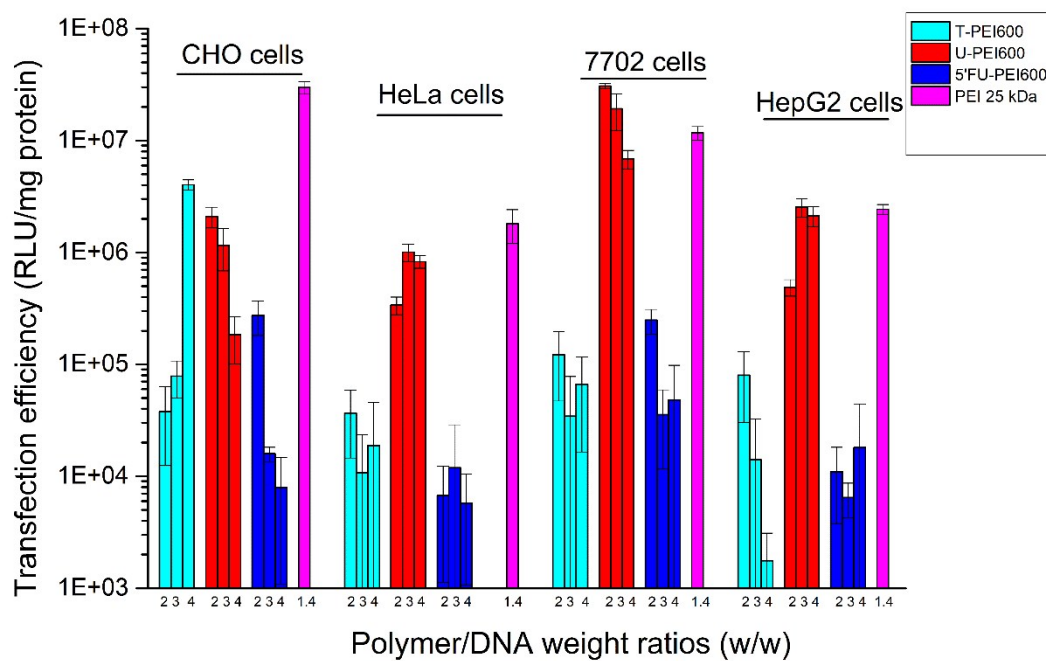


Fig. S8. Luciferase gene expression transfected by polyplexes at different mass ratios in comparison with 25 kDa bPEI (w/w=1.4) in the presence of 10% serum. Data represent mean \pm SD (n = 3).

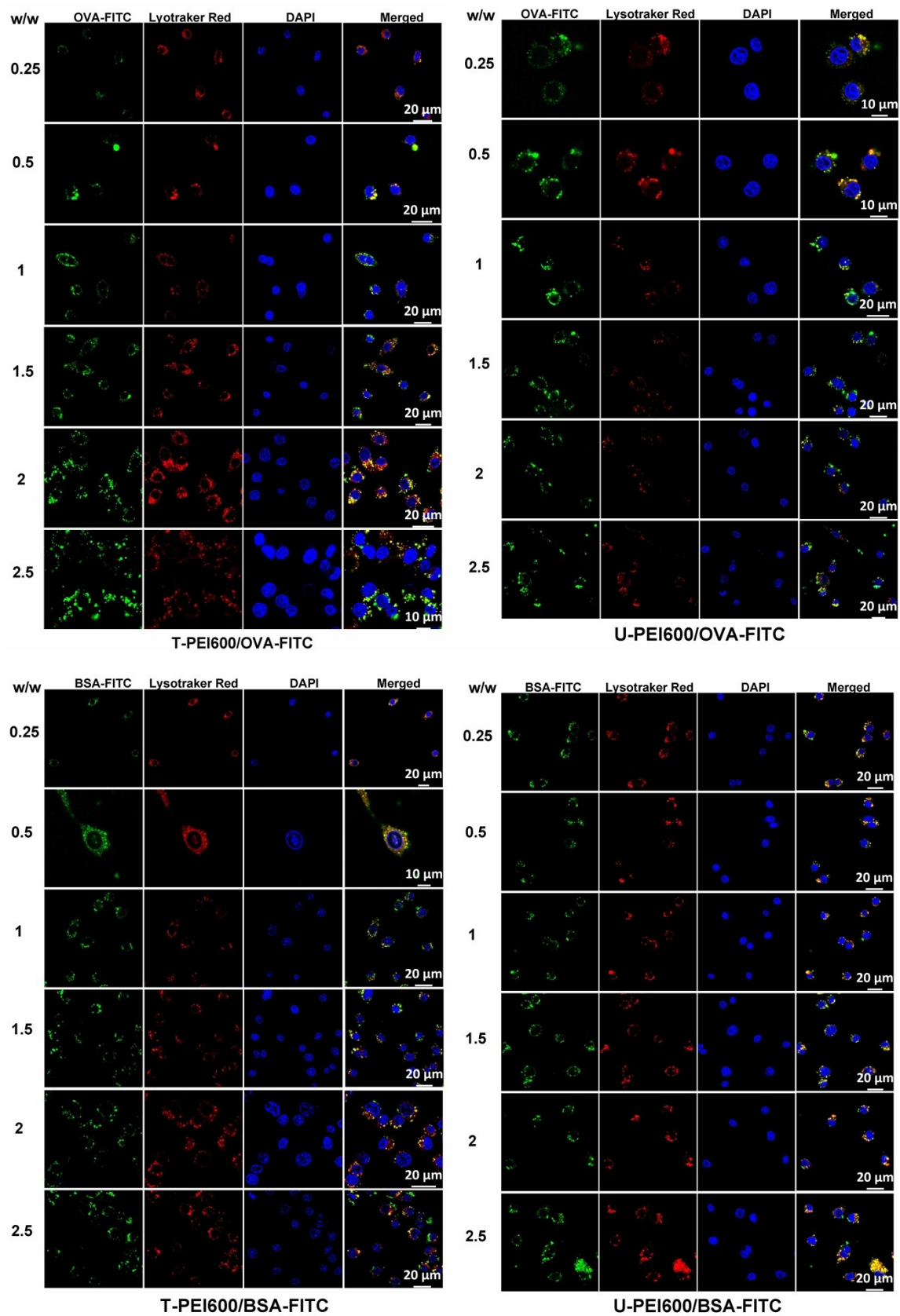


Fig. S9. Intracellular distribution of FITC-labeled protein (green) complexes on Raw 264.7 cells at different weight ratio for 4 h in the absence of 10% serum. The nuclei were stained with DAPI (blue), and the endosome/lysosomes were stained with LysoTracker Red (red). Scar bar is 20 μm.

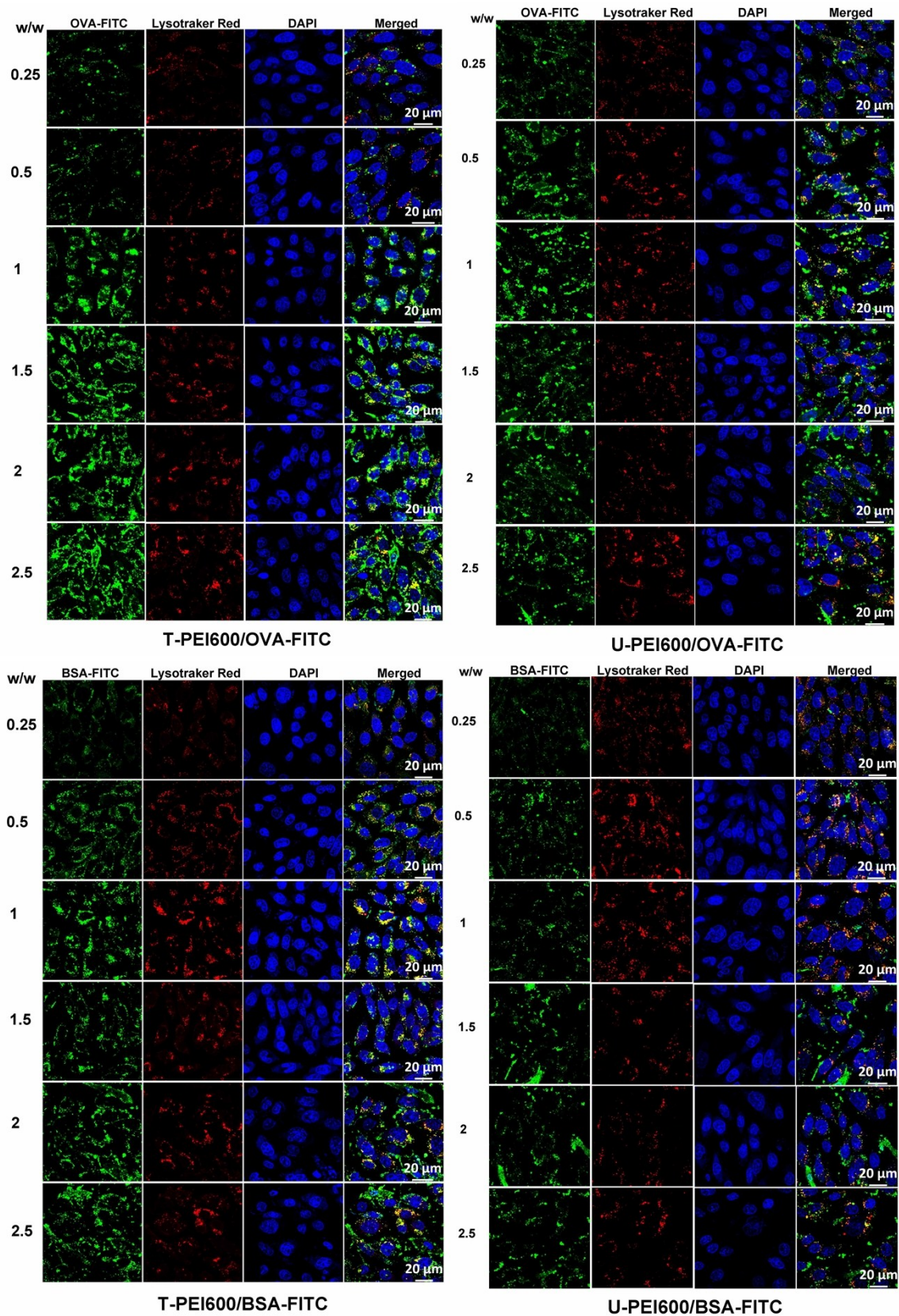


Fig. S10. Intracellular distribution of FITC-labeled protein (green) complexes on CHO cells at different weight ratio for 4 h in the absence of 10% serum. The nuclei were stained with DAPI (blue), and the endosome/lysosomes were stained with LysoTracker Red (red). Scar bar is 20 μm.

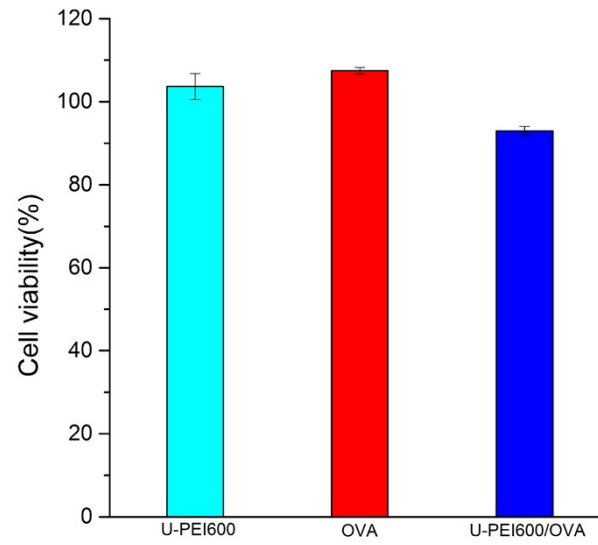


Fig. S11. The viability of Raw 264.7 cells treated with U-PEI600, OVA or U-PEI600/OVA complexes at mass ratio of 1. Data are presented as mean \pm SD (n = 3).