

## Electronic Supplementary Information (ESI)

### PEGylated Reduced Graphene Oxide as a Superior ssRNA Delivery System

*Liming Zhang,<sup>†a,b,c</sup> Zunliang Wang,<sup>†b</sup> Zhuoxuan Lu,<sup>†b,c</sup> and He Shen,<sup>a</sup> Jie Huang,<sup>a</sup>*

*Qinghuan Zhao,<sup>a</sup> Min Liu,<sup>a</sup> Nongyue He,<sup>\*b,c</sup> and Zhijun Zhang<sup>\*a</sup>*

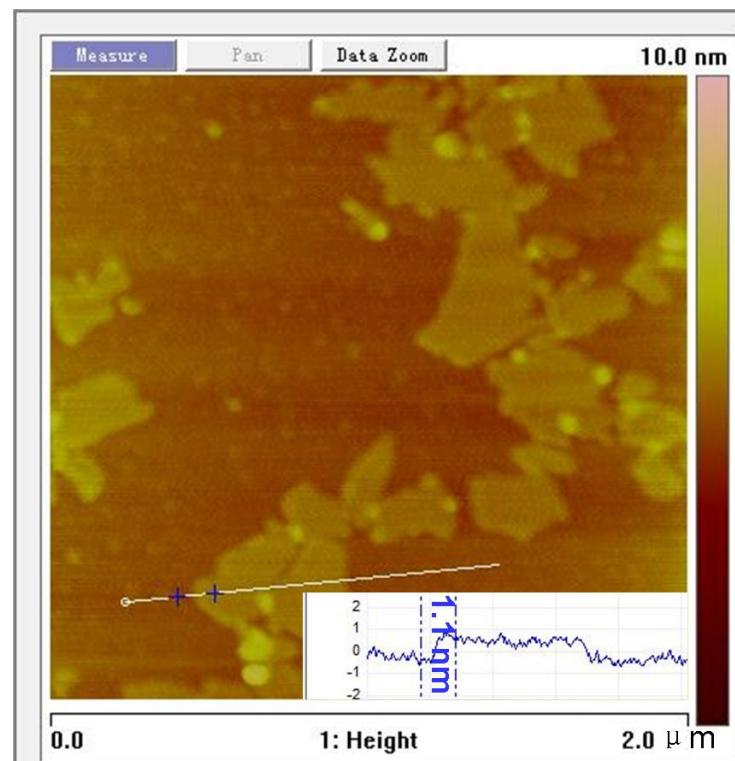


Fig. S1. AFM image of GO.

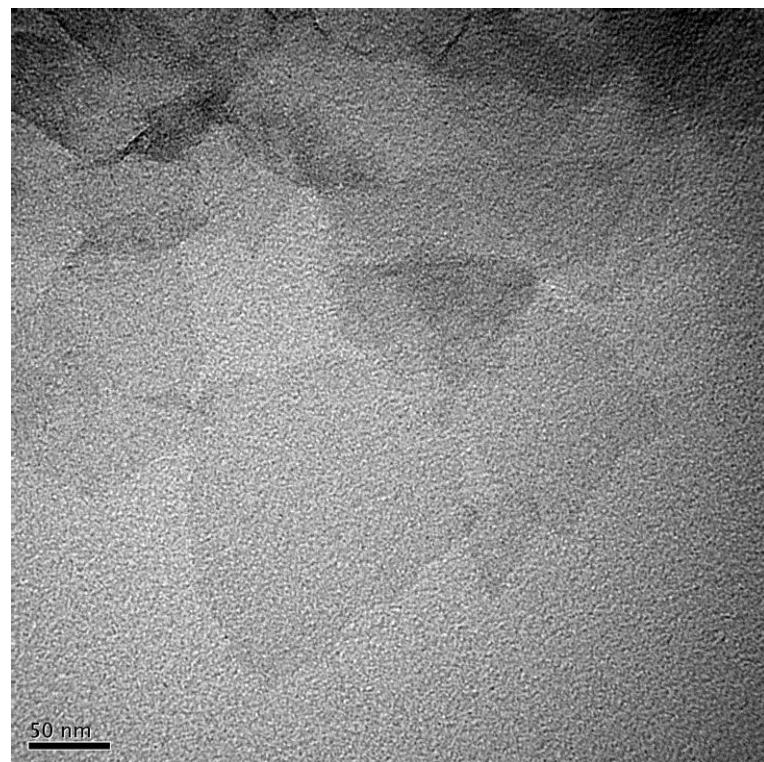


Fig. S2. TEM image of GO.

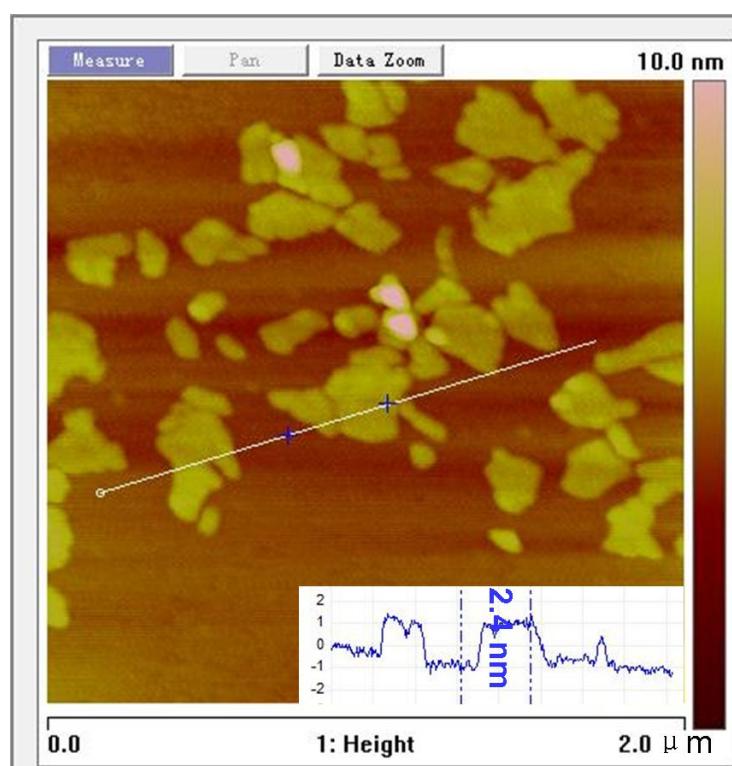


Fig. S3. AFM image of PEG-RGO.

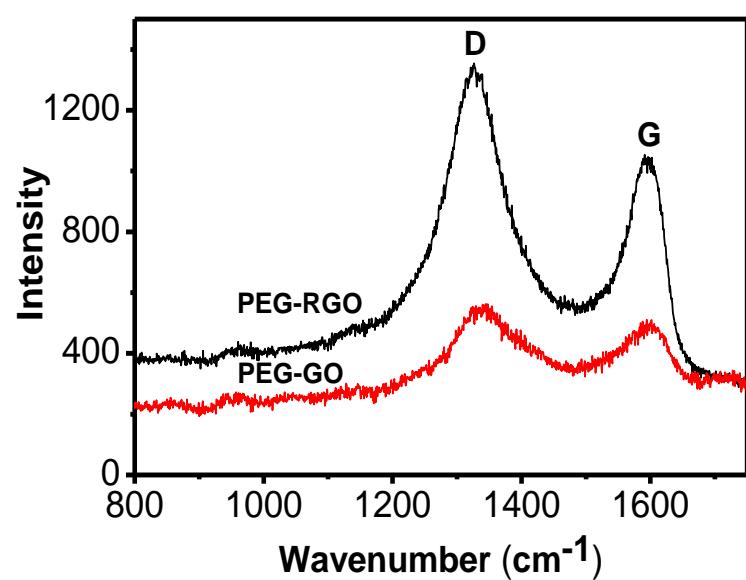


Fig. S4. Raman spectra of PEG-RGO and PEG-GO.

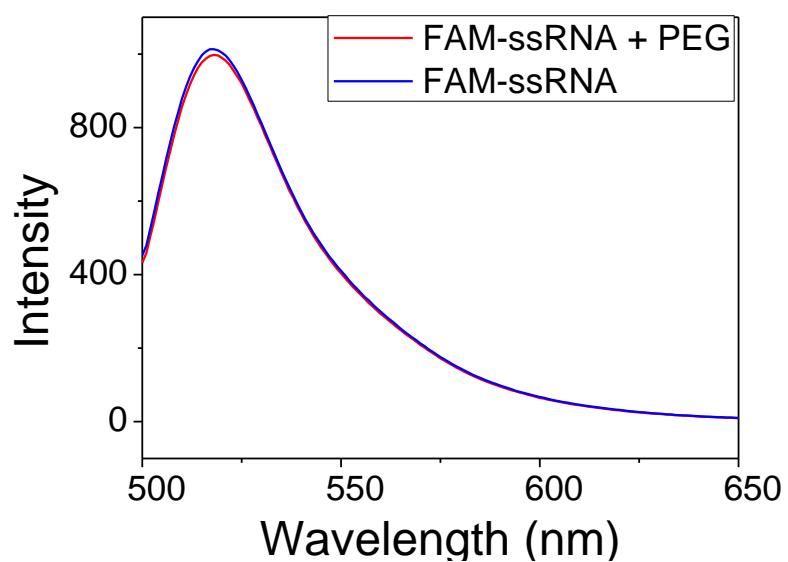


Fig. S5. Fluorescence emission spectra (excitation at 480 nm) of FAM-ssRNA (100 nM) before and incubation with PEG at a concentration of  $100 \text{ mg L}^{-1}$ , respectively.

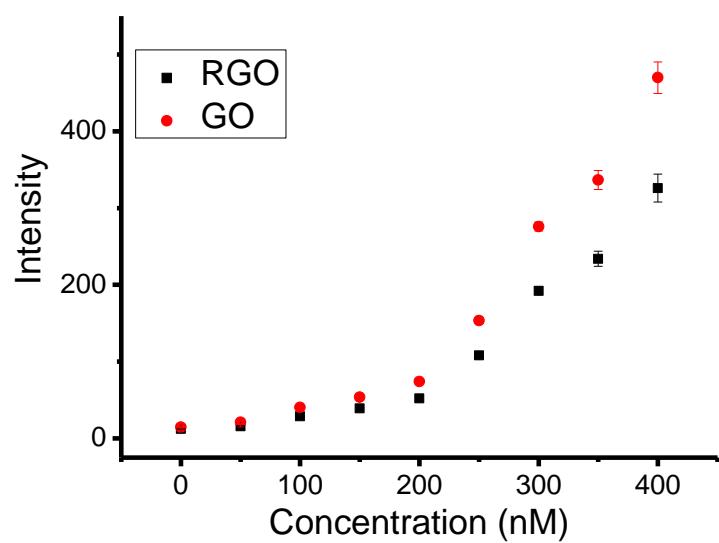


Fig. S6. Plot of fluorescence intensity of the FAM-ssRNA-GO and FAM-ssRNA-RGO complexes as a function of the concentration of the complimentary DNA.