

Supporting Information

Single-Particle Enumeration-Based Ultrasensitive Enzyme Activity Quantification with Fluorescent Polymer Nanoparticles

Yameng Han,^a Zhongju Ye,^a Fuyan Wang,^b Tianyu Chen,^a Lin Wei,^b Langxing Chen^{*,a} and Lehui Xiao^{*,a}

^a State Key Laboratory of Medicinal Chemical Biology, Tianjin Key Laboratory of Biosensing and Molecular Recognition, College of Chemistry, Nankai University, Tianjin, 300071, China;

^b Key Laboratory of Phytochemical R&D of Hunan Province, College of Chemistry and Chemical Engineering, Hunan Normal University, Changsha, 410081, China.

* Corresponding author

Email: lxchen@nankai.edu.cn; lehuixiao@nankai.edu.cn;

KEYWORDS: acetylcholinesterase; conjugated polymer nanoparticles; label-free; single-particle; fluorescence microscopy

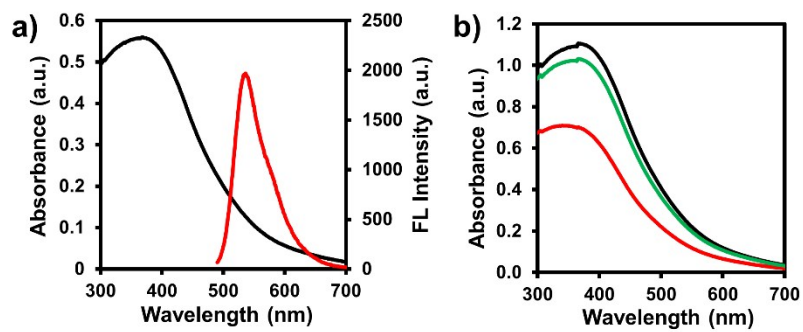


Fig. S1 (a) The UV-vis absorption spectrum of MnO₂ nanosheets (black line) and the fluorescence emission spectrum of FCPNPs (red line). (b) The UV-vis absorption spectrum of MnO₂ nanosheets (black line), MnO₂ nanosheets+ATCh+AChE (red line) and MnO₂ nanosheets+ATCh+AChE+carbaryl (green line).

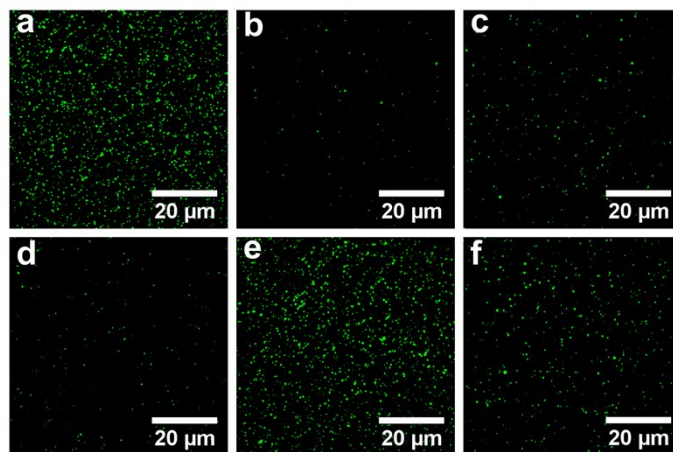


Fig. S2 Representative fluorescence images of (a) FCPNPs, (b) FCPNPs+MnO₂, (c) FCPNPs+MnO₂+ATCh, (d) FCPNPs+MnO₂+AChE, (e) FCPNPs+MnO₂+ATCh+AChE and (f) FCPNPs +MnO₂+ATCh+AChE+Carbaryl.