

Electronic supplementary information

Simple and convenient G-quadruplex-based fluorescent assay of micrococcal nuclease activity

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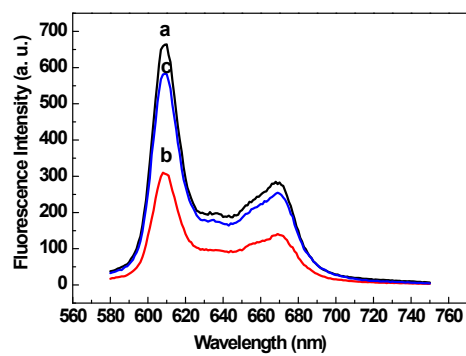


Figure S1 Comparison the fluorescence intensity caused by the adding order of MNase and K^+ . (a) $d[G_3(T_4G_3)_3] + K^+ + NMM$; (b) $d[G_3(T_4G_3)_3] + MNase + K^+ + NMM$; (c) $d[G_3(T_4G_3)_3] + K^+ + MNase + NMM$. Concentration: $d[G_3(T_4G_3)_3]$, $2 \mu M$; MNase, 1.2×10^{-3} units/mL; K^+ , 5 mM; NMM, $0.8 \mu M$. Excitation: 399 nm.

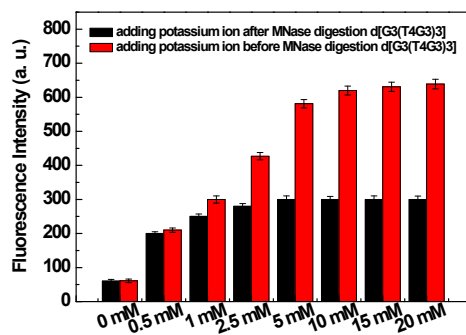


Figure S2 Comparison the fluorescence intensity caused by the adding order of MNase and K⁺ with increasing concentration of K⁺.

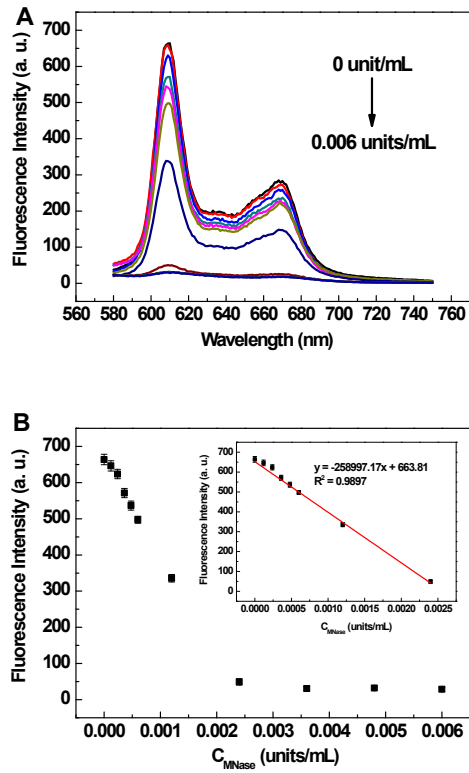


Figure S3 Fluorescence emission spectra of G-quadruplex-based biosensor in the presence of increasing amount of MNase in 10% culture medium (A) and fluorescence intensity of G-quadruplex-based biosensor in the presence of different concentration of MNase (inset: calibration curve for MNase detection) in 10% culture medium (B). Excitation: 399 nm.