

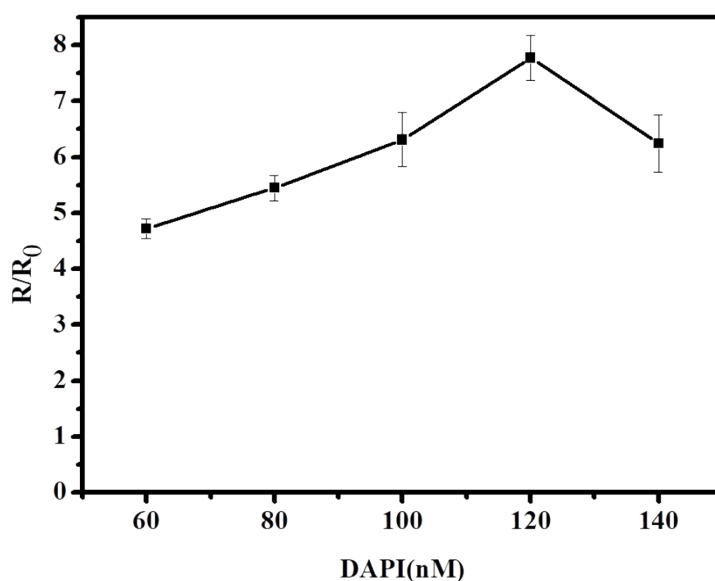
## A label-free ratiometric fluorescent strategy for 3'-5' exonuclease detection

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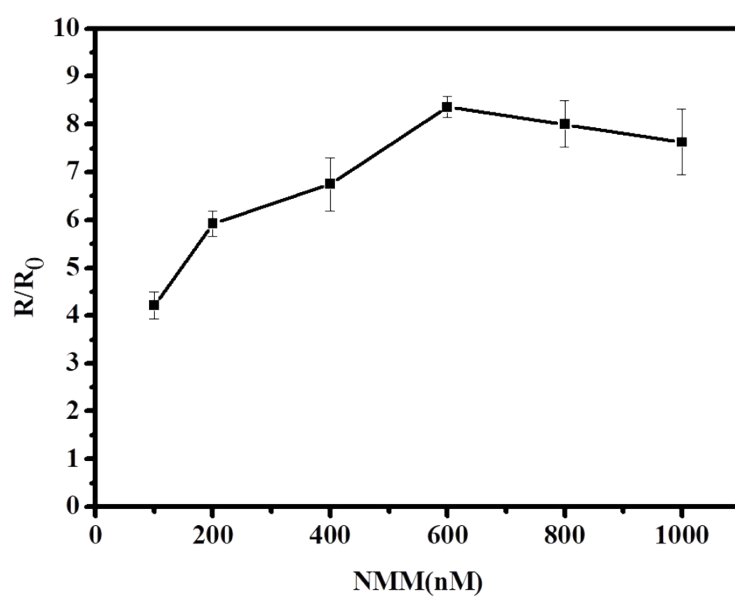
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### Optimization of experimental conditions



**Fig. S1.** Effect of DAPI concentration on the signal-to-background ratio ( $R/R_0$ ). Error bars were estimated from three replicate measurements.



**Fig. S2.** Effect of NMM concentration on the signal-to-background ratio ( $R/R_0$ ). Error bars were estimated from three replicate measurements.

**Table S1.** Figures of recently reported methods for Exo III detection.

Label or Not	LOD	Signal output mode	Ref.
Yes	0.04 U/mL	Single wavelength	[13]
Yes	0.01 U/mL	Single wavelength	[14]
Yes	$3 \times 10^{-4}$ U/mL.	Single wavelength	[15]
No	1 U/ml	Single wavelength	[17]
No	0.8 U	Single wavelength	[18]
No	0.02 U/mL	Single wavelength	[19]
No	0.02 U/mL	Single wavelength	[20]
No	0.7 U/mL	Single wavelength	[21]
No	4.42 U/mL	Ratiometric	in this work