

Electronic Supplementary Information

A Label-Free Near-Infrared Fluorescent Assay for the Determination of Deoxyribonuclease I Activity Based on Malachite Green /G-quadruplexes

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Table S1. Comparison of the proposed DNase I activity assay with other methods for determining DNase I activity with respect to the synthesis of probe, detection limit and linear dynamic range.

Methods	Synthesis	Detection limit	Linear dynamic range	Reference
NIR Fluorescence	No	1 u/mL	5-100 u/mL	This work
Electrochemical assay	Yes	0.1 u/mL	0.1-1 u/mL	(1)
Electrochemical assay	Yes	0.01 u/mL	0.01-1 u/mL	(2)
Colorimetric methods	Yes	0.01 u/mL	Not available	(3)
Fluorescence probes	Yes	0.02 u/mL	0.03-9 u/mL	(4)
ELISA	Yes	0.004 u/mL	0.004-0.138 u/mL	(5)
Immunochemical assay	Yes	0.005 u/mL	0.005-0.1 u/mL	(6)
Fluorescence probe (PicoGreen)	No	8×10^{-5} u/mL	8×10^{-5} - 8×10^{-4} u/mL	(7)
SRED/CAM	Yes	5×10^{-6} u/mL	5×10^{-6} -0.2 u/mL	(8)

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