

Supporting Information

A G-quadruplex based platform for label-free monitoring of DNA reaction kinetics

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Table S1 DNA sequences used in this work

Name	Sequence (5'- to 3'-)
X'-Y'	TCCCTCCCTCCCTCCCAGTCCAGACTCTAACTATAACAACCTACTACCTCAA-P
Y'-Y'	TCCCTCCCTCCCTCCCAGTCCAGACTCTTCCCTCCCTCCCTCCCAGA-P
X'-Y'-A10	AAAAAAAAAATCCCTCCCTCCCTCCCAGTCCAGACTCTAACTATAACAACCTACTACCTCAA -P
X'-Y'-A5	AAAAATCCCTCCCTCCCTCCCAGTCCAGACTCTAACTATAACAACCTACTACCTCAA-P
Target X	TGAGGTAGTAGGTTGTATAGTT
EAD2	CTGGGAGGGAGGGAGGGA
EAD2-T5	CTGGGAGGGAGGGAGGGATTTTT
EAD2-T10	CTGGGAGGGAGGGAGGGATTTTTTTTTT

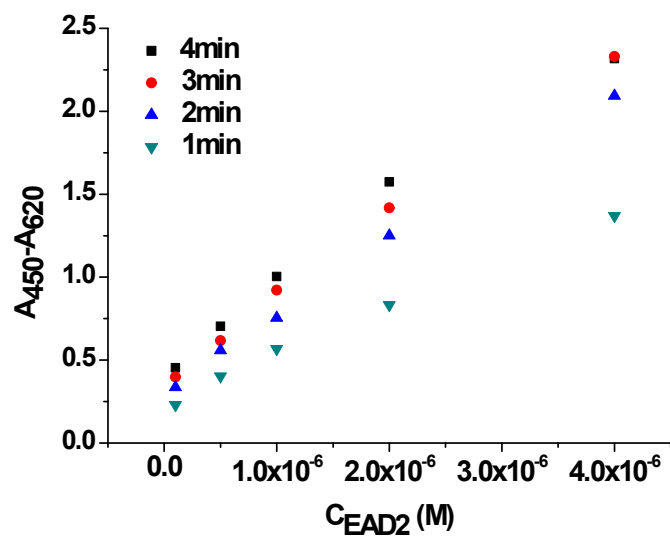


Figure S1 The optimization of coloration time for EAD2/hemin DNAzyme catalyzed TMB-H₂O₂ colorimetry: calibration curves of ($A_{450} - A_{620}$) vs. EAD2 concentration at different coloration time.

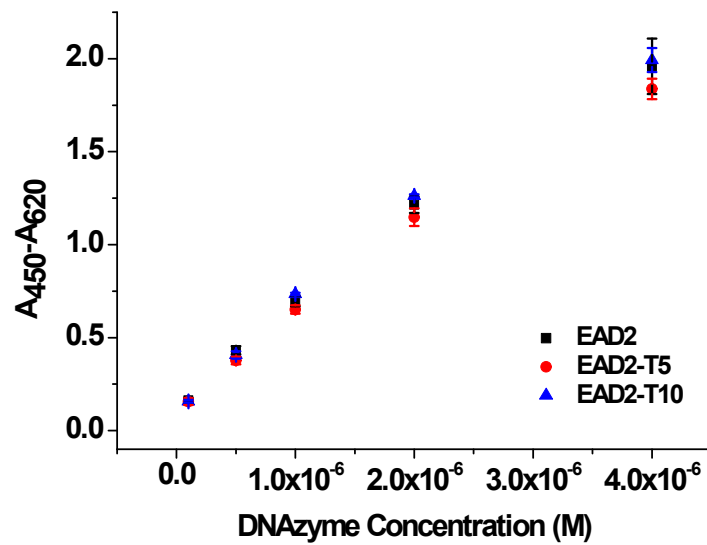


Figure 2S The comparison of DNAzyme catalytic activity of EAD2, EAD2-T5, EAD2-T10 in the presence of hemin.