

Supplementary Materials: Design and Characterization of a Novel Artificial Peroxidase

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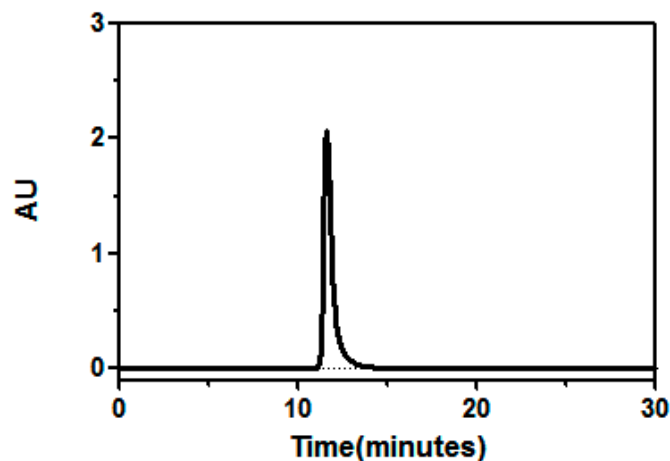


Figure S1. RP-HPLC of Dh-A-H-E.

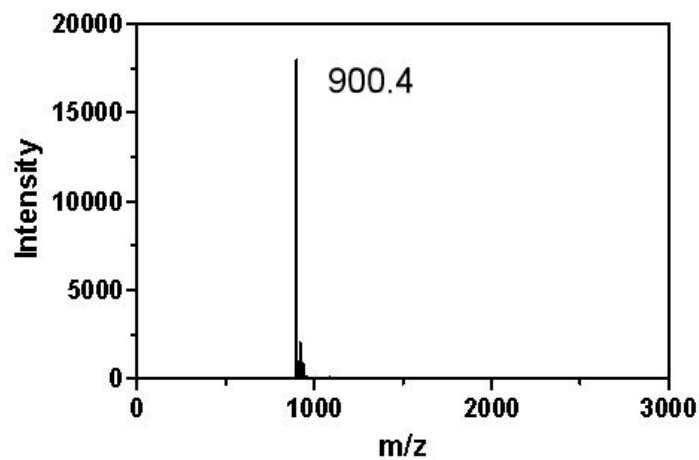


Figure S2. TOF-MS of Dh-A-H-E.

Table S1. Comparison of various mimetic peroxidase for H₂O₂ detection.

Catalyst	Linear range	LOD (Limit of detection)	Analysis time	Reference
BSA-Au nanoclusters	1-100 μ M	0.3 μ M	30min	[27]

Grapheneoxide-Fe ₃ O ₄ nanocomposites	1–50μM	0.32μM	15min	[28]
Dichlorofluorescein	5-600μM	2μM	50min	[29]
Fe ^{III} (biuret-amide) mesoporous silica nanoparticles	100-500μM	10μM	Not given	[30]
Dh-A-H-E	2-75μM	0.5μM	5min	This work

Table S2. Comparison of various mimetic peroxidase for glucose detection.

Catalyst	Linear range	LOD (Limit of detection)	Analysis time	Reference
BSA-Au nanoclusters	10-500μM	5μM	30min	[27]
Grapheneoxide-Fe ₃ O ₄ nanocomp-osites	2-200μM	0.74μM	15min	[28]
Dichlorofluorescein	80-1200μM	30μM	50min	[29]
Fe ^{III} (biuret-amide) mesoporous silica nanoparticles	20-300μM	10μM	Not given	[30]
Dh-A-H-E	10-180μM	2μM	5min	This work