Electronic Supplementary Materials

Accuracy Improvement via Novel Ratiometry Design in Distance-Based Microfluidic Paper Based Analytical Device: Instrument-free POCT

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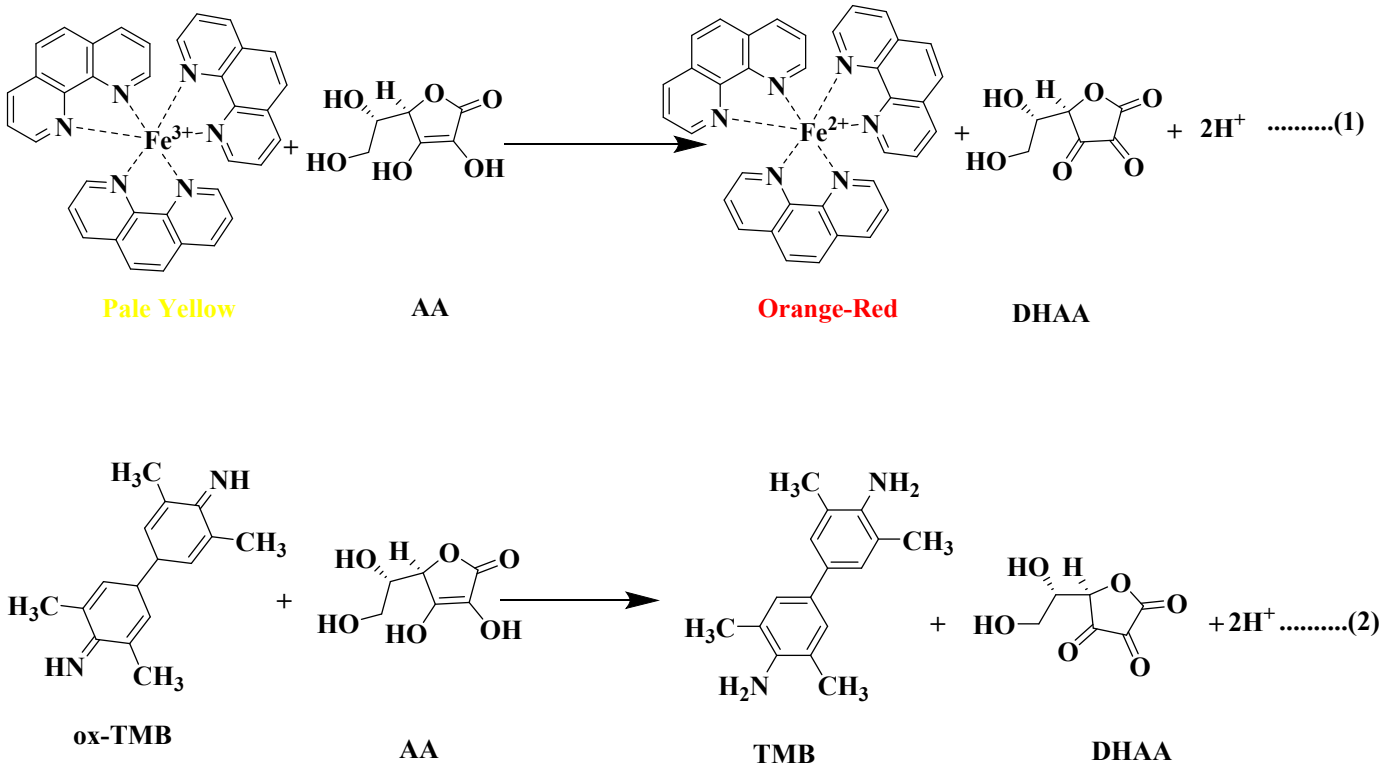

Figure S1. The reaction between Fe-1,10-Phenanthroline complex and AA (A), reduction of oxidized TMB to TMB in the presence of AA (B).

Table 1S

Comparison of the recoveries obtained for four different AA standards using the proposed distance-based design with and without a 3D connector.

Standard AA (mM)	Without 3D Connector			With 3D Connector			Difference in Error%
	Found (mM)	Recovery%	Error %	Found (mM)	Recovery%	Error%	
0.2	0.173	86.5 ± 1.8	13.5 ± 1.8	0.189	94.5 ± 2	5.5 ± 2	8
0.4	0.357	89.2 ± 1.2	10.7 ± 1.2	0.375	93.7 ± 1.8	6.2 ± 1.8	4.5
0.6	0.556	92.6 ± 1.2	7.3 ± 1.2	0.578	96.3±0.5	3.6 ± 0.5	3.67
0.8	0.773	96.6 ± 0.8	3.3 ± 0.8	0.786	98.2 ± 0.7	1.7 ± 0.7	1.62