

Support Information

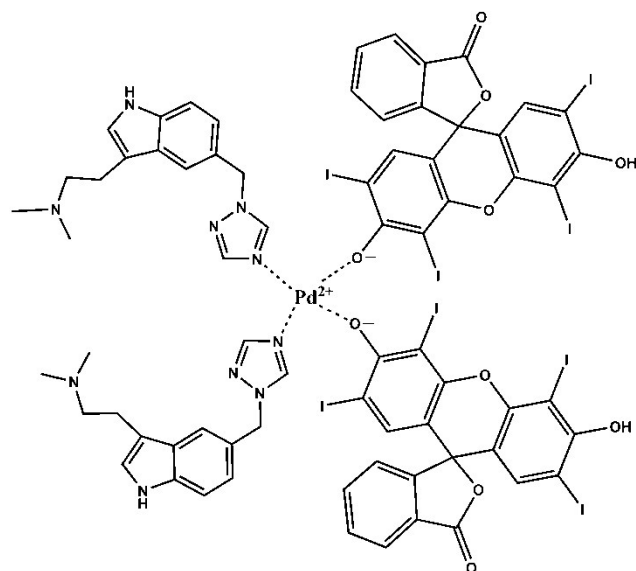
SI.1. The distribution fraction of Ery second order dissociation in medium of HAc-NaAc buffer solution (pH=4.5)

$$\begin{aligned}\delta_{Y^{2-}} &= \frac{K_{a_1} K_{a_2}}{[H^+]^2 + K_{a_1} [H^+] + K_{a_1} K_{a_2}} \\ &= \frac{10^{-4} \times 10^{-5.3}}{[10^{-4.5}]^2 + 10^{-4} \times 10^{-4.5} + 10^{-4} \times 10^{-5.3}} = 0.1075\end{aligned}$$

SI.2. The distribution fraction of Ery in medium of HAc-NaAc buffer solution (pH=4.5).

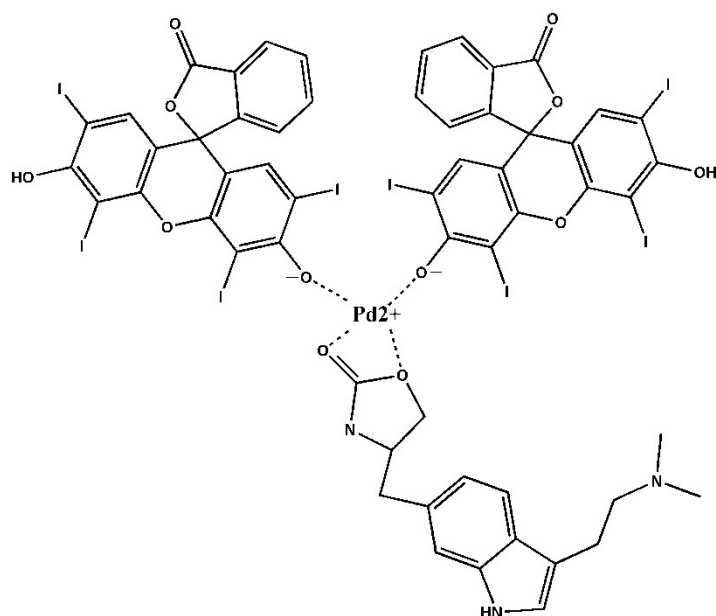
$$\begin{aligned}\delta_{H_2Y} &= \frac{[H^+]^2}{[H^+]^2 + K_{a_1} [H^+] + K_{a_1} K_{a_2}} \\ &= \frac{[10^{-4.5}]^2}{[10^{-4.5}]^2 + 10^{-4} \times 10^{-4.5} + 10^{-4} \times 10^{-5.3}} = 0.2144\end{aligned}$$

SI.3. The incorporation ratio of RIN with Pd (II) and Ery.

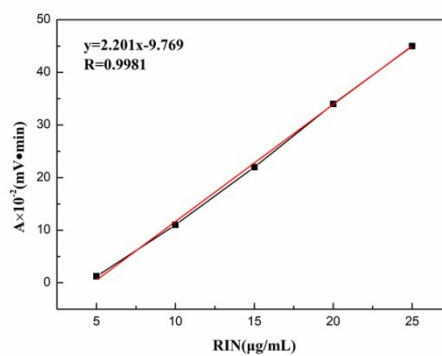
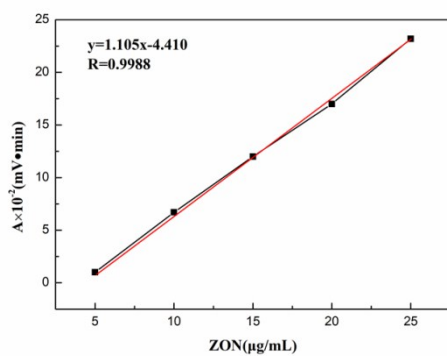


2:1:2 ion-association complex

SI.4. The incorporation ratio of ZON with Pd (II) and Ery.



SI.5. The calibration curves for the drugs.



SI.6. Comparison of HPLC-RRS with other methods for determination of ZON and RIN.

Analytical method	drug	Linear range ($\mu\text{g}\cdot\text{mL}^{-1}$)	Detection limit ($\mu\text{g}\cdot\text{mL}^{-1}$)	References
Spectrofluorimetric assay	ZON/RIN	0.1-1.0	0.041	1
		0.20-1.0	0.032	
Spectrophotometric method	ZON/RIN	50-400	11.06	2
		70-650	12.43	
Voltammetry	ZON	0.012-0.092	0.0058	3
HPLC-MS	ZON	0.001-0.04	5×10^{-5}	4
HPLC	ZON	0.1-5.0	0.1	5
HPLC-RRS	ZON/RIN	0.033—25	0.0097	This paper
		0.027—25	0.0048	

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3. M. A. E.-S. a. A. K. Attia, *Anal. Bioanal. Electrochem.*, 2013, **5**, 32-45.
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