

Multi-Target Antibacterial Mechanism of Ruthenium Polypyridine Complexes with anthraquinone groups against *Staphylococcus aureus*

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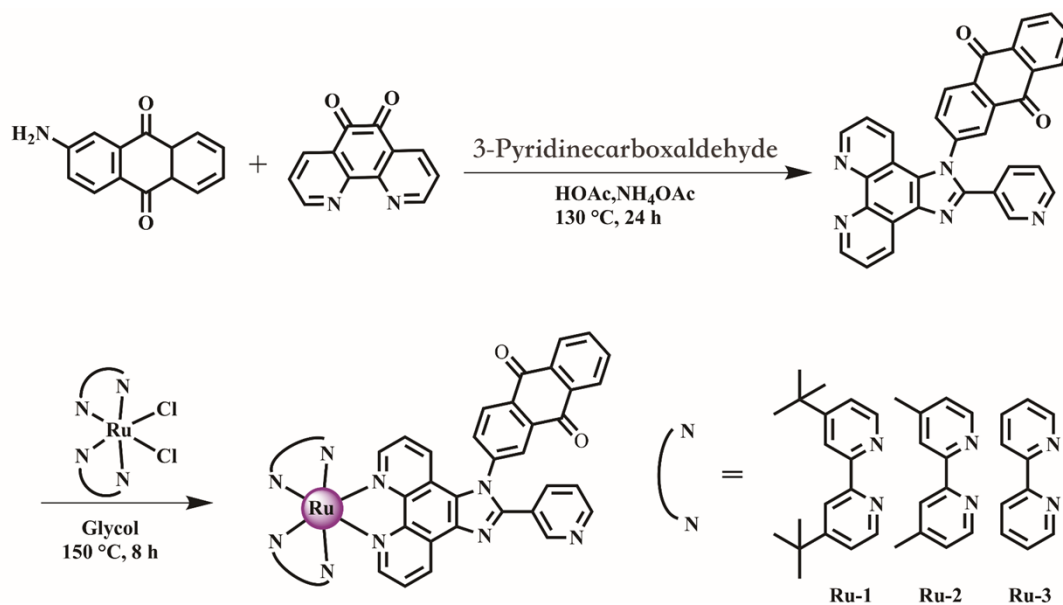


Fig. S1. The synthetic route of three Ru(II) complexes.

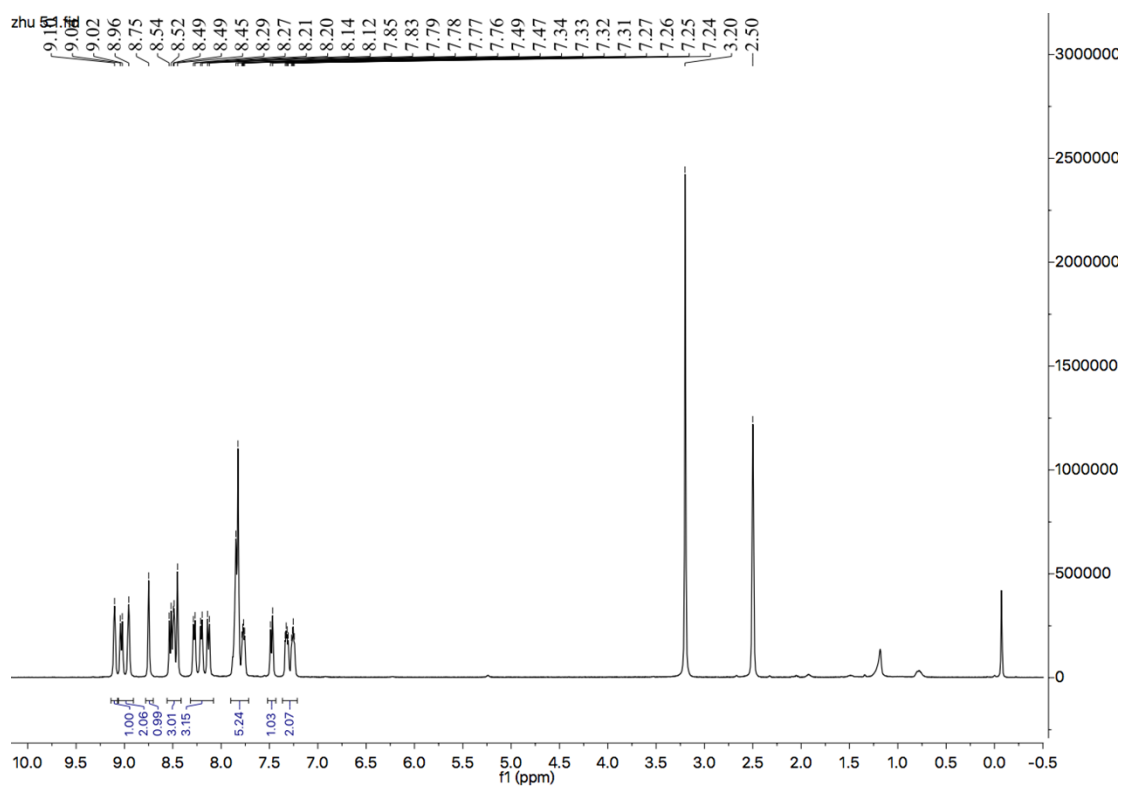


Fig. S2. ¹H NMR spectrum of PPAD.

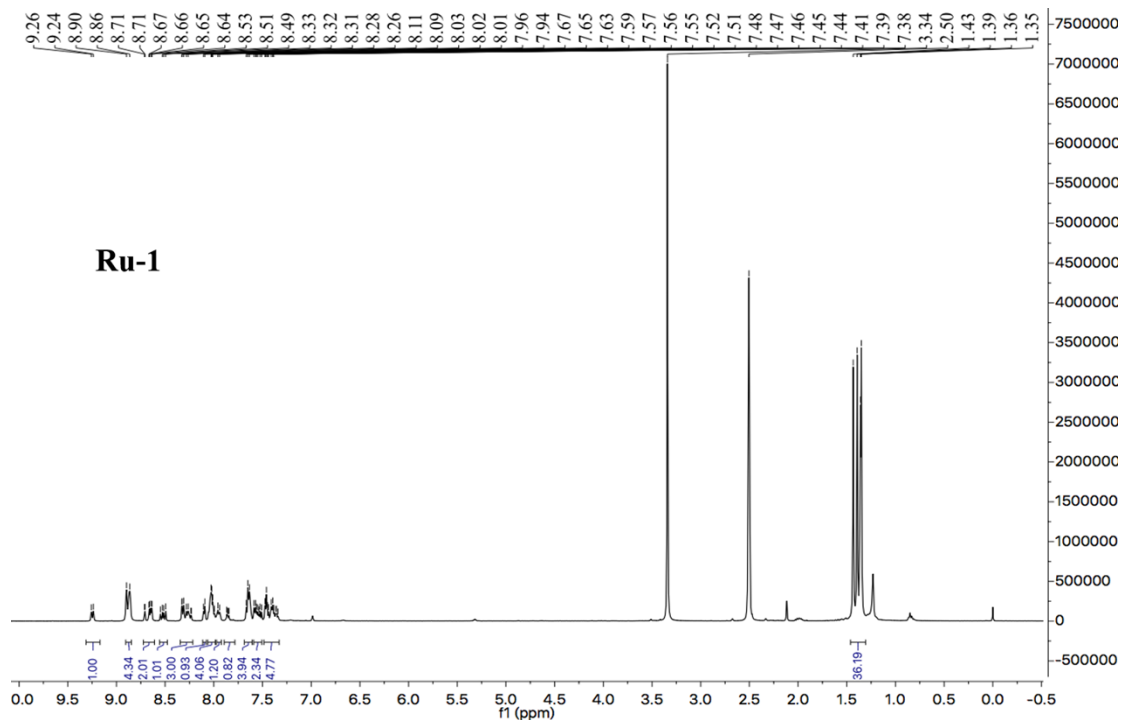


Fig. S3 ^1H NMR spectrum of Ru-1.

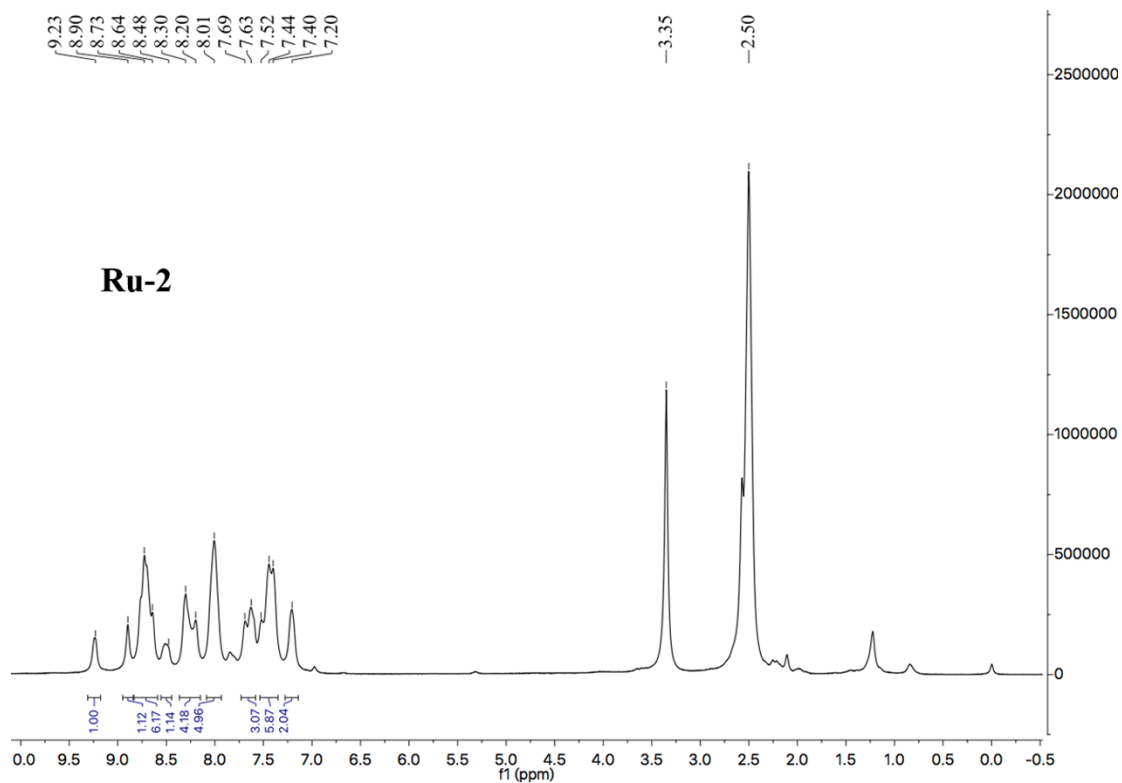


Fig. S4 ^1H NMR spectrum of Ru-2.

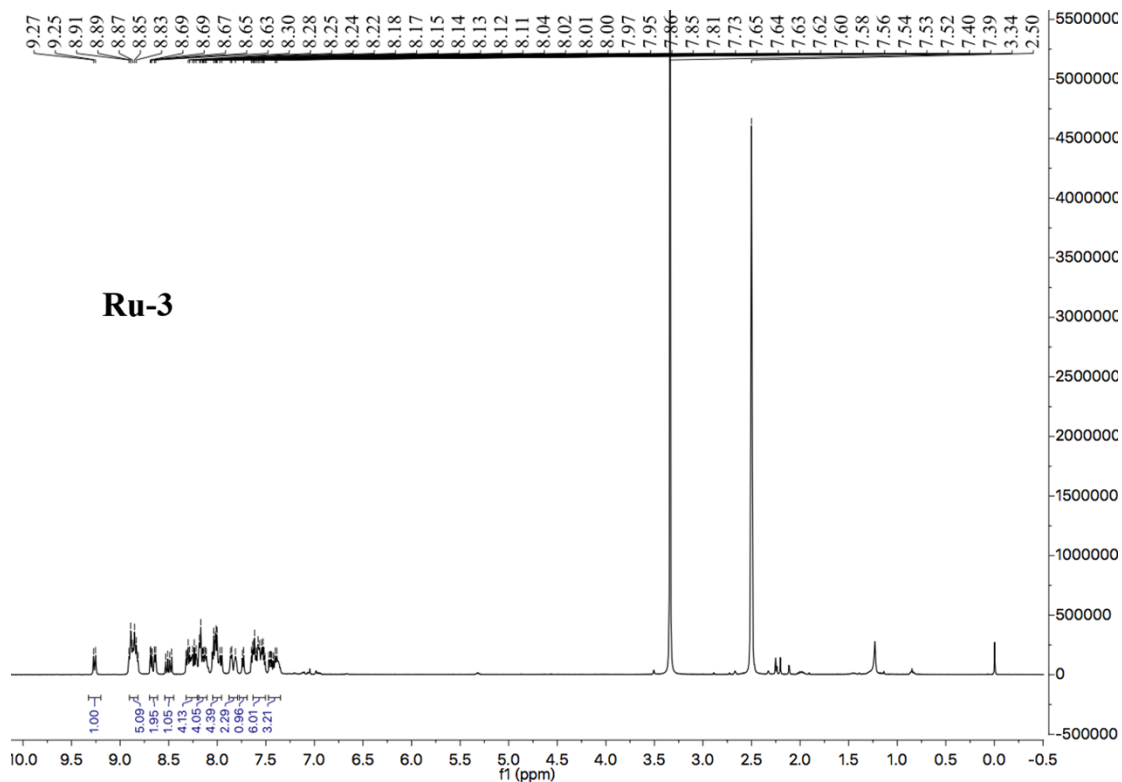


Fig. S5 ^1H NMR spectrum of Ru-3.

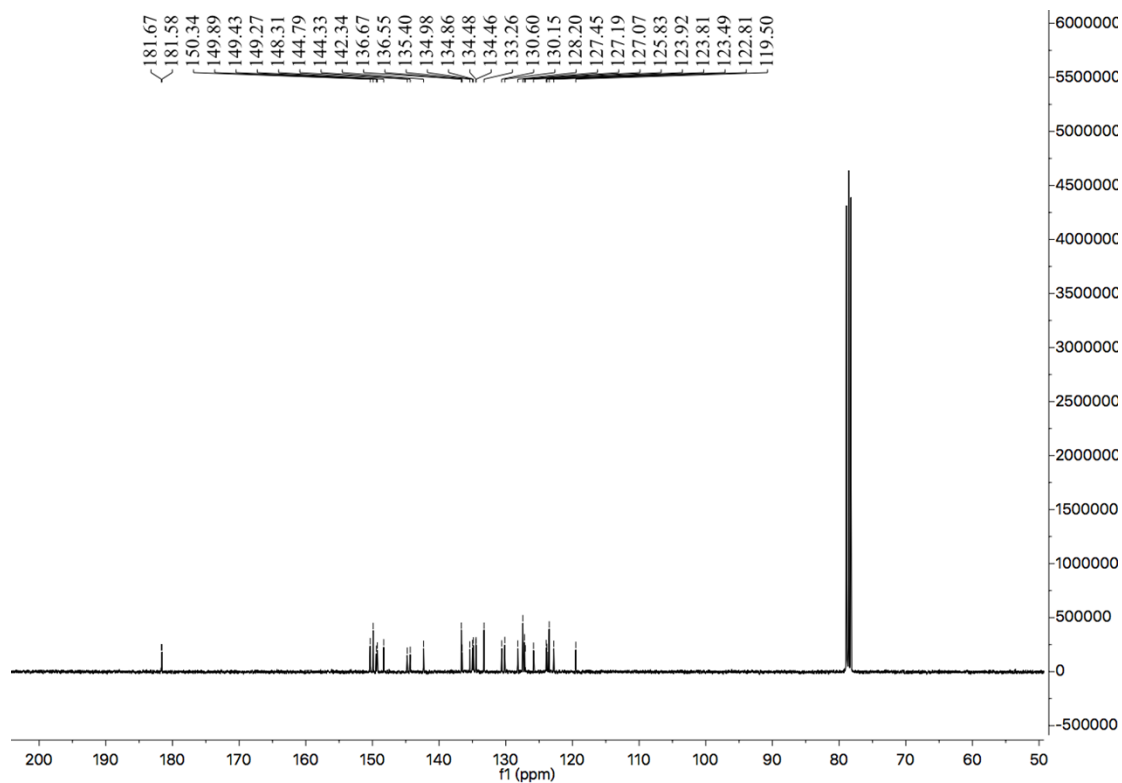


Fig. S6. ^{13}C NMR spectrum of PPAD.

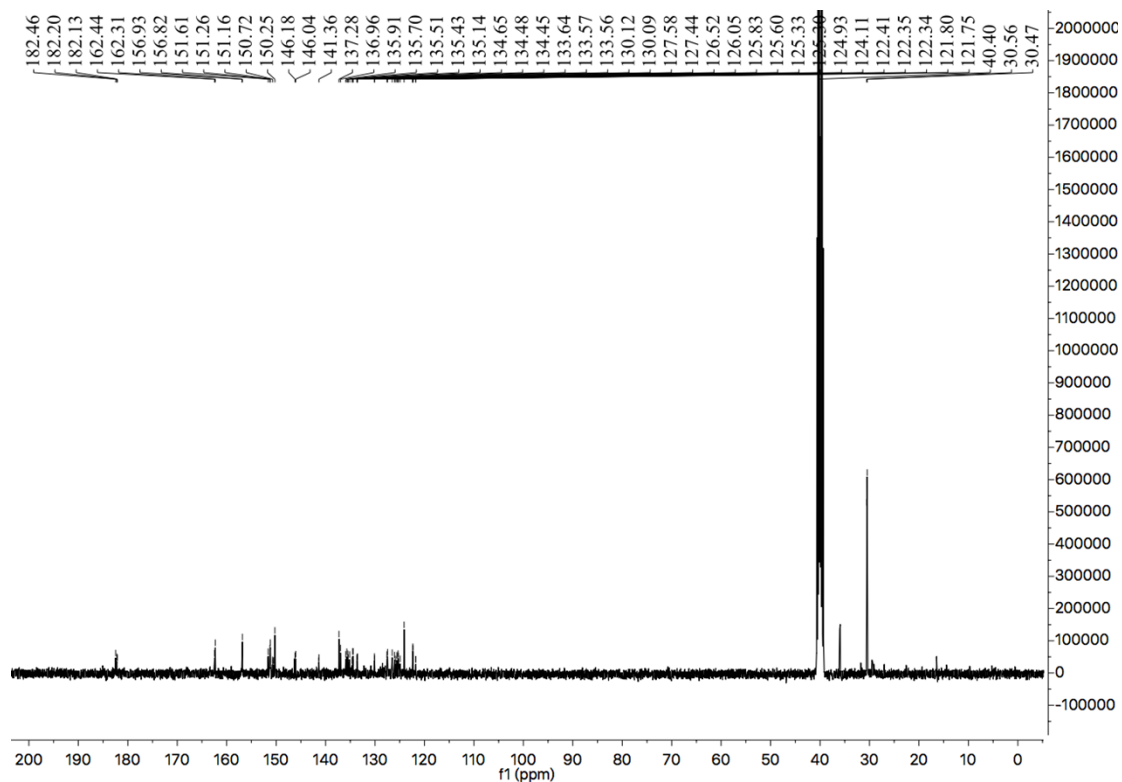


Fig. S7 ^{13}C NMR spectrum of Ru-1.

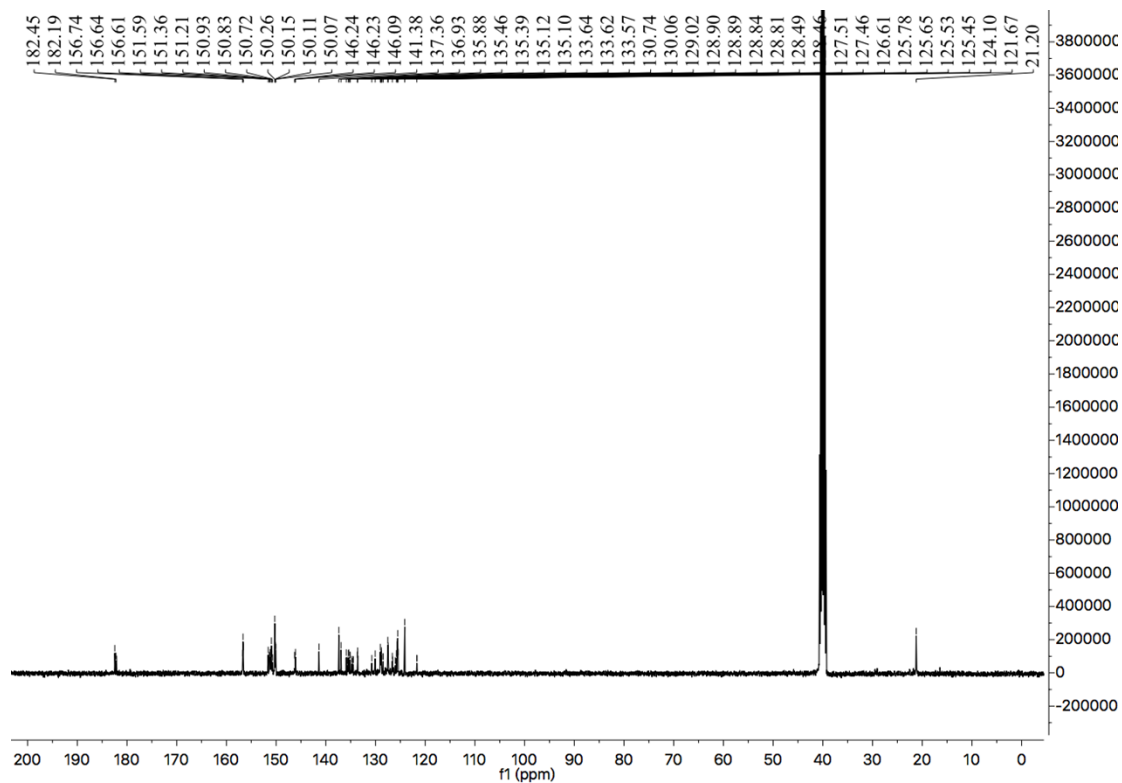


Fig. S8 ^{13}C NMR spectrum of Ru-2.

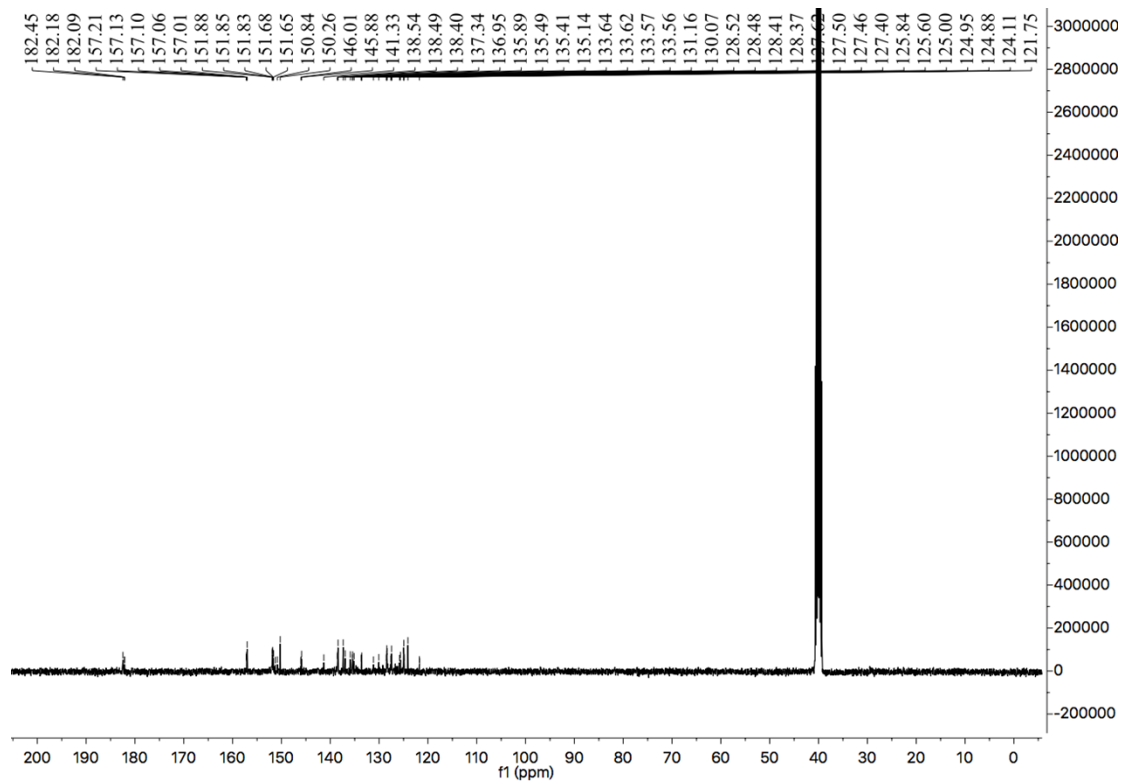


Fig. S9 ^{13}C NMR spectrum of **Ru-3**.

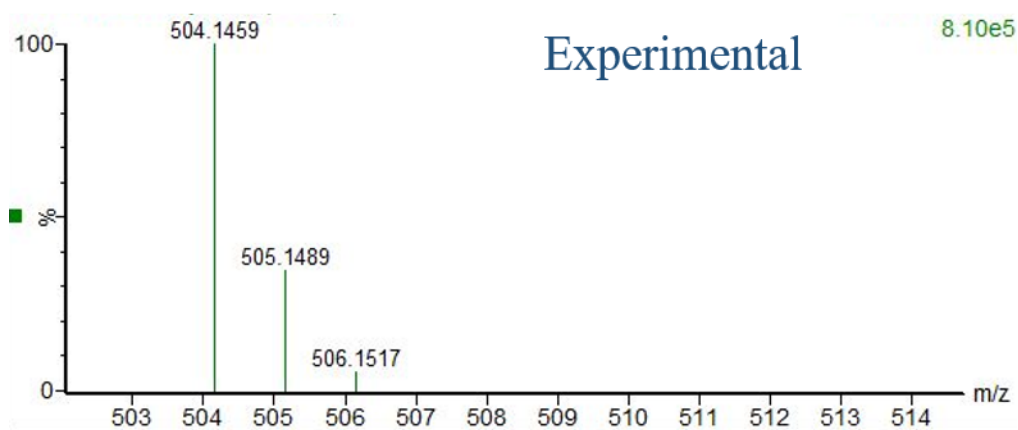
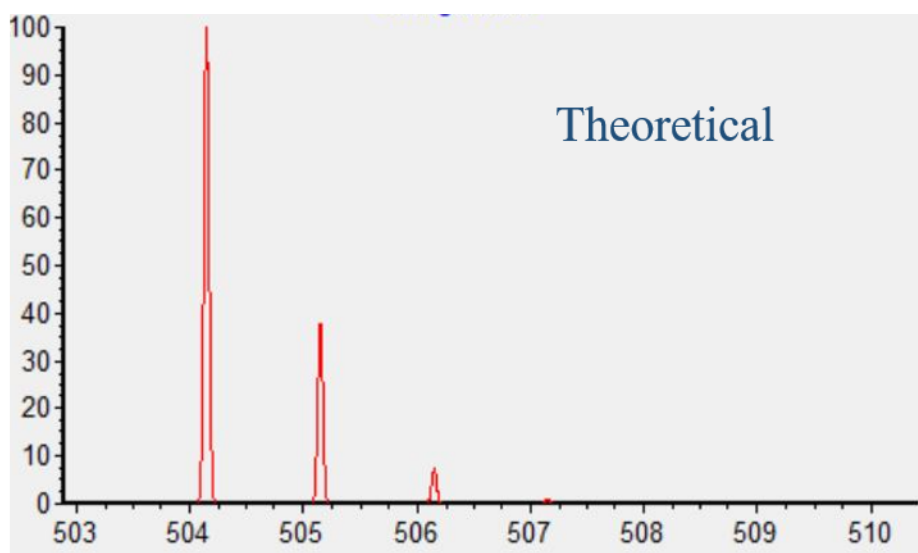


Fig. S10 HRMS spectrum of PPAD.

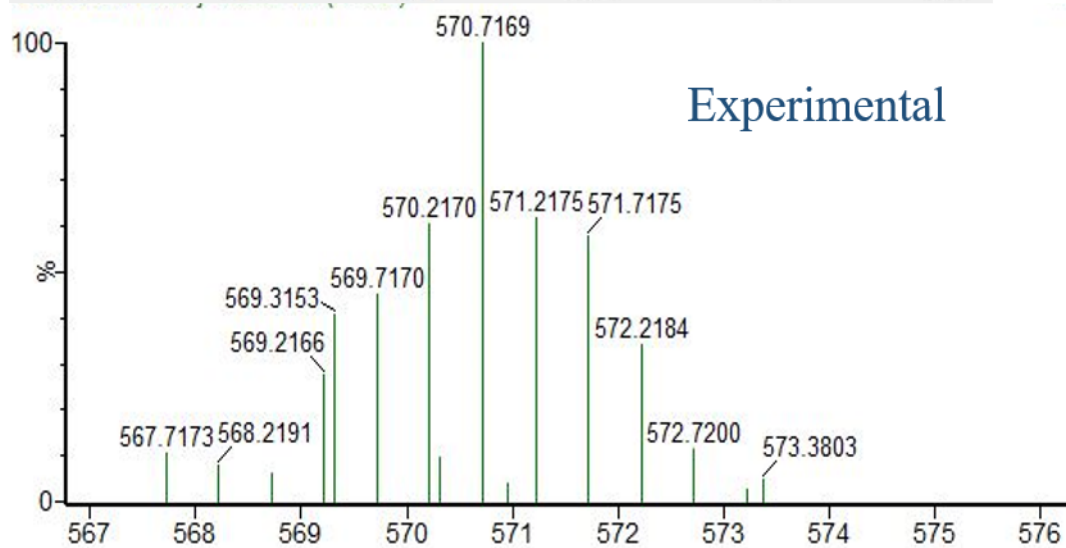
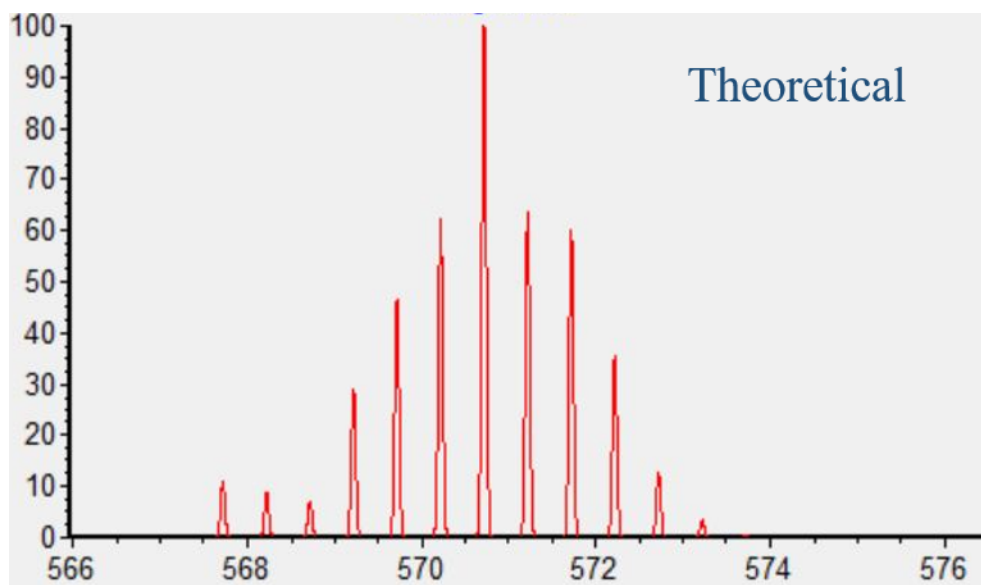


Fig. S11 HRMS spectrum of **Ru-1**.

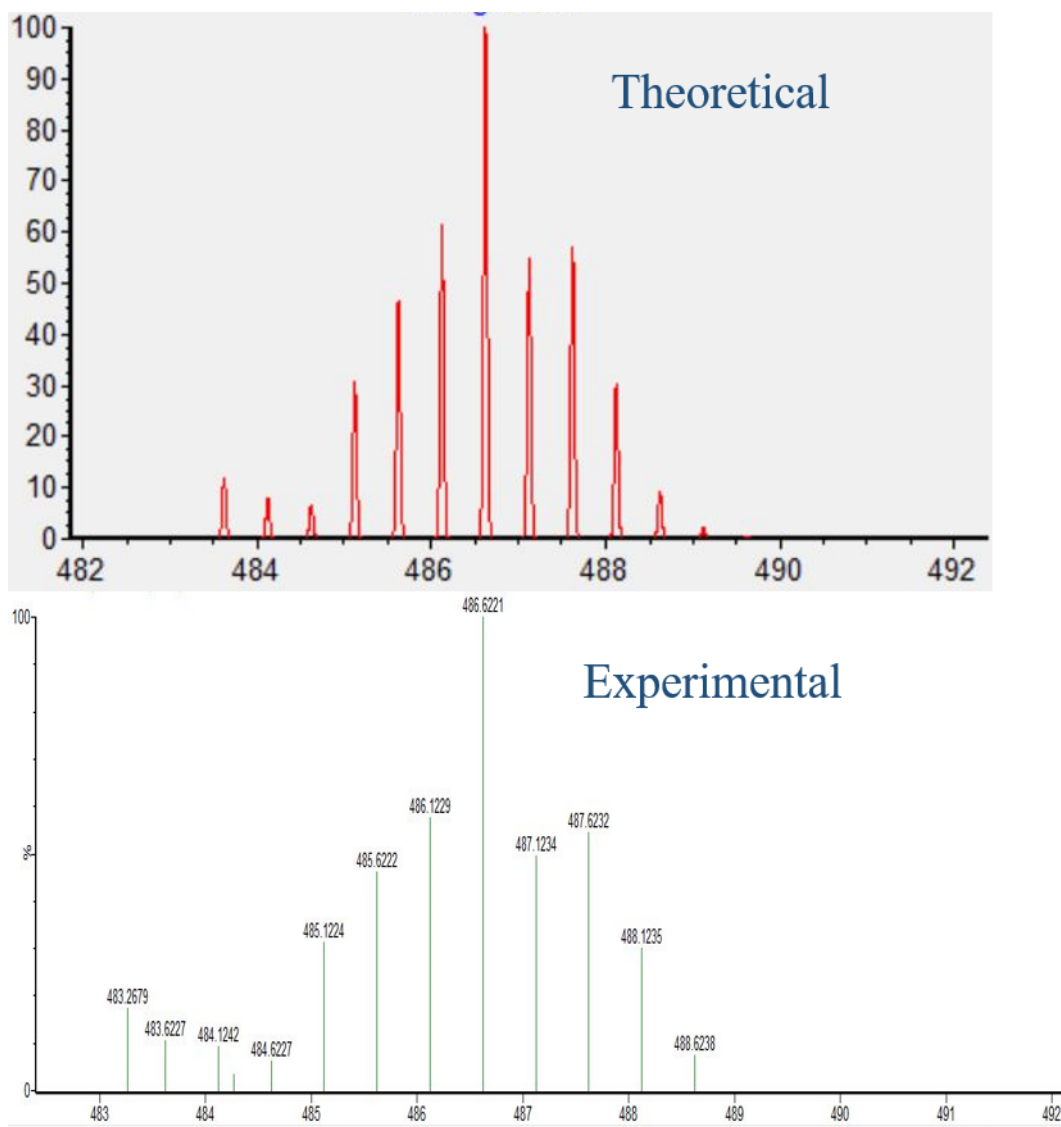


Fig. S12 HRMS spectrum of **Ru-2**.

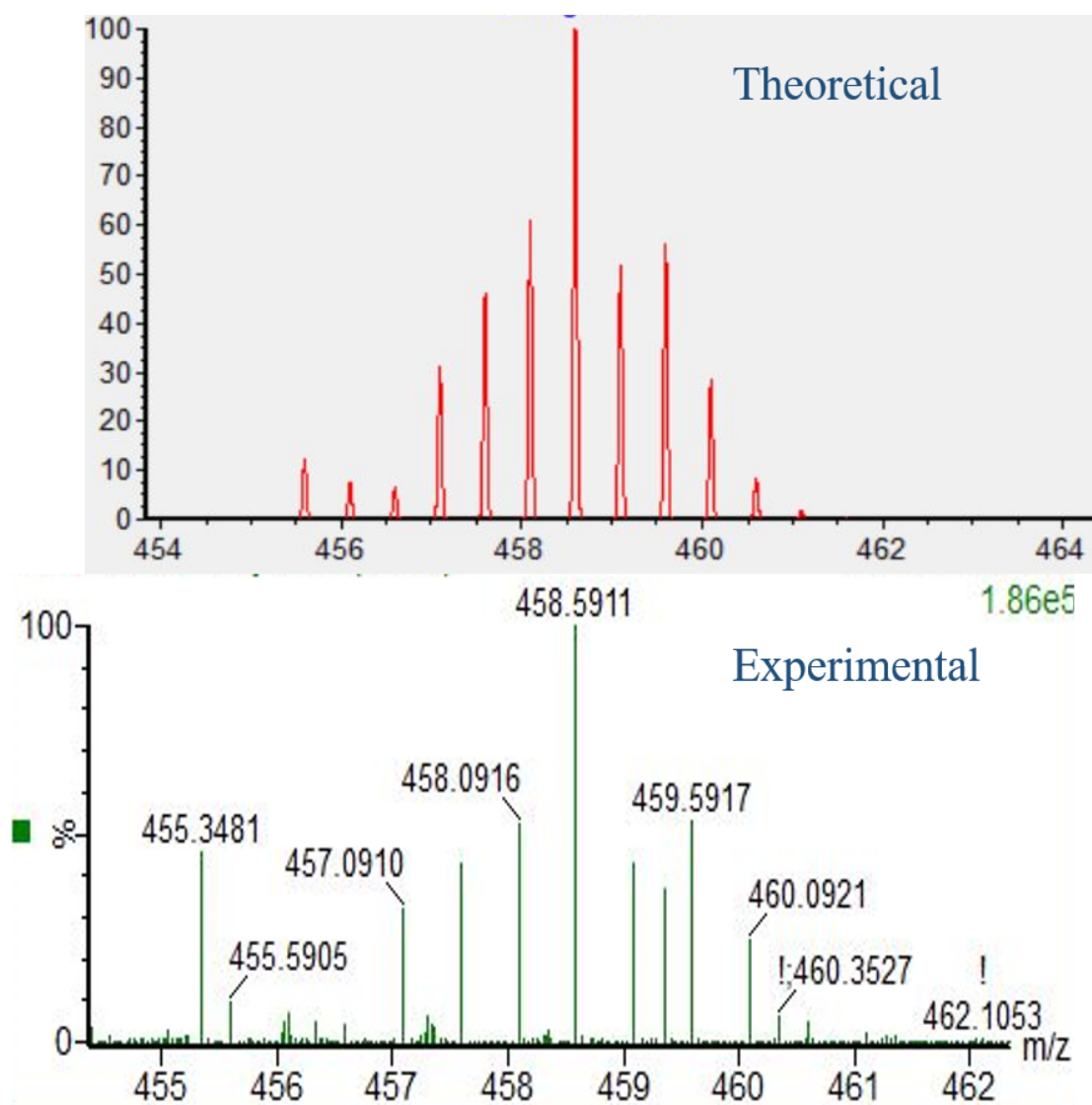


Fig. S13 HRMS spectrum of **Ru-3**.

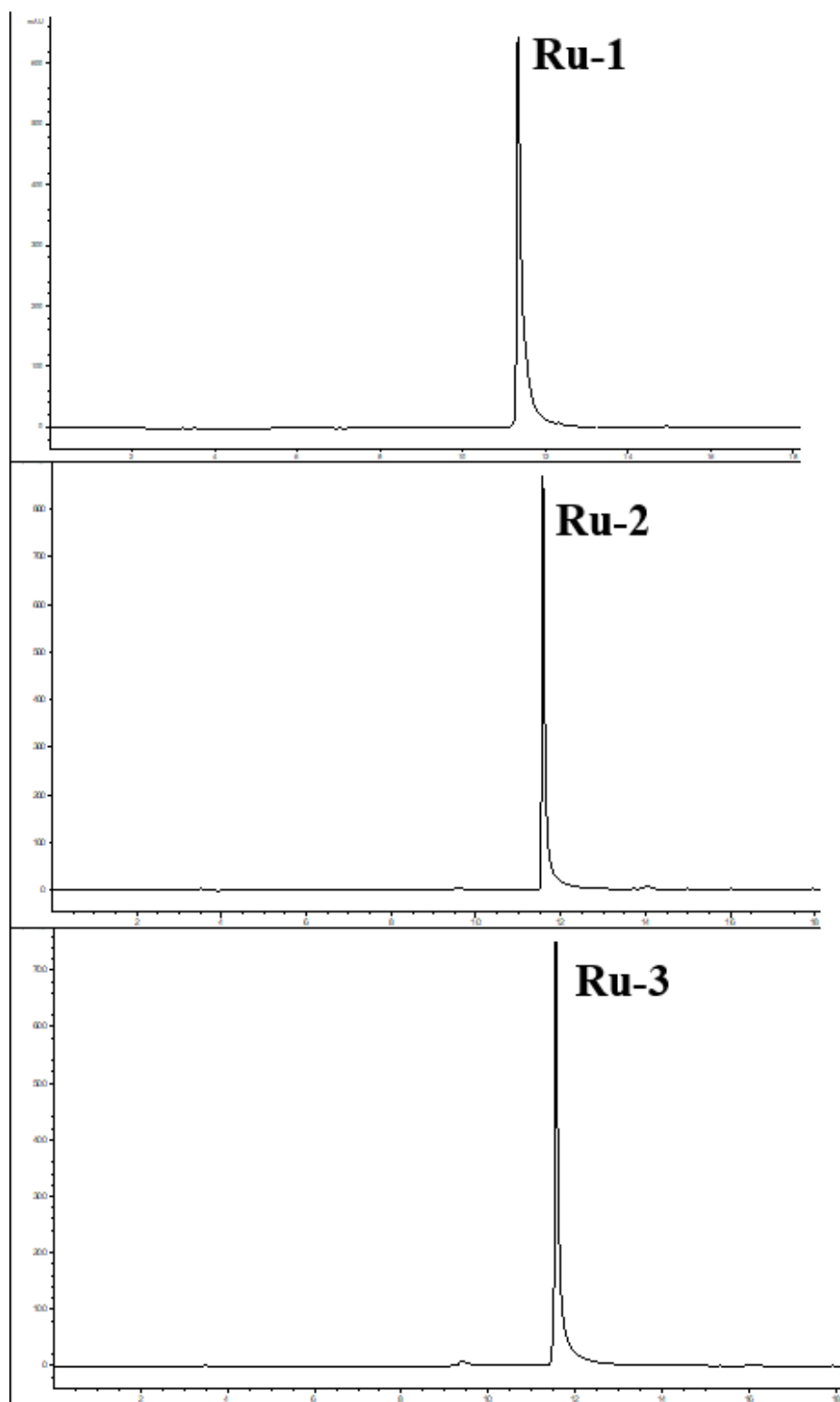


Fig. S14 HPLC spectrum of **Ru-1**, **Ru-2** and **Ru-3**.

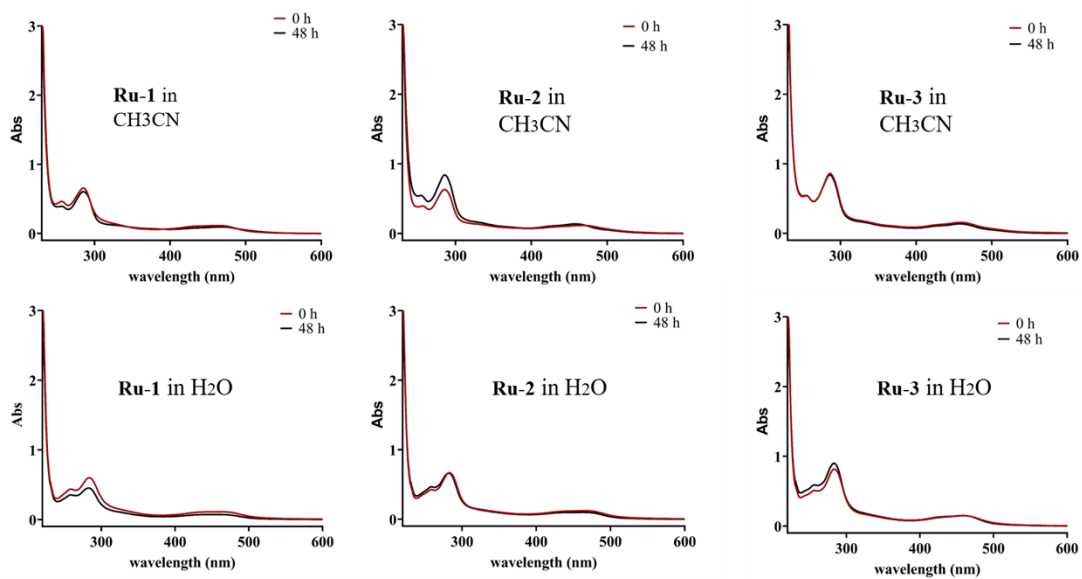


Fig. S15 stability of **Ru-1**, **Ru-2** and **Ru-3**.

Table S1. MIC ($\mu\text{g/mL}$) of **Ru-1** to *S. aureus* with different antibiotic resistance.

	<i>S. aureus</i>	PBRSA	ORSA	ARSA	TRSA	CRSA
Ru-1	1	1	1	1	1	1

PBRSA: polymyxin B resistant *S. aureus*. ORSA: ofloxacin resistant *S. aureus*. ARSA: ampicillin resistant *S. aureus*. TRSA: tetracycline resistant *S. aureus*. CRSA: clindamycin resistant *S. aureus*.