

## Supporting Information

Article

# Synthesis, characterization, DNA/HSA interactions, and anticancer activity of two novel Copper(II) complexes with 4-chloro-3-nitrobenzoic acid ligand

Zhen-Fang Zeng<sup>1,\*</sup>, Qiu-Ping Huang<sup>1</sup>, Jie-Hui Cai<sup>1</sup>, Guang-Jin Zheng<sup>1</sup>, Qiu-Chan Huang<sup>1</sup>, Zi-Lu Liu<sup>1</sup>, Zi-Lu Chen<sup>2,\*</sup>, You-Huan Wei<sup>1,\*</sup>

1 School of Chemical and Biological Engineering, Guangxi Normal University for Nationalities, 23 Fozhi Road, Chongzuo 532200, PR China

2 State Key Laboratory for the Chemistry and Molecular Engineering of Medicinal Resources, School of Chemistry and Pharmacy, Guangxi Normal University, 15 Yucan Road, Guilin 541004, PR China

\* Corresponding author: zengzhenfang@gxnun.edu.cn, zlchen@mailbox.gxnu.edu.cn, weiyouthuan@gxnun.edu.cn.

Telephone/Fax: 86-771-787-0799

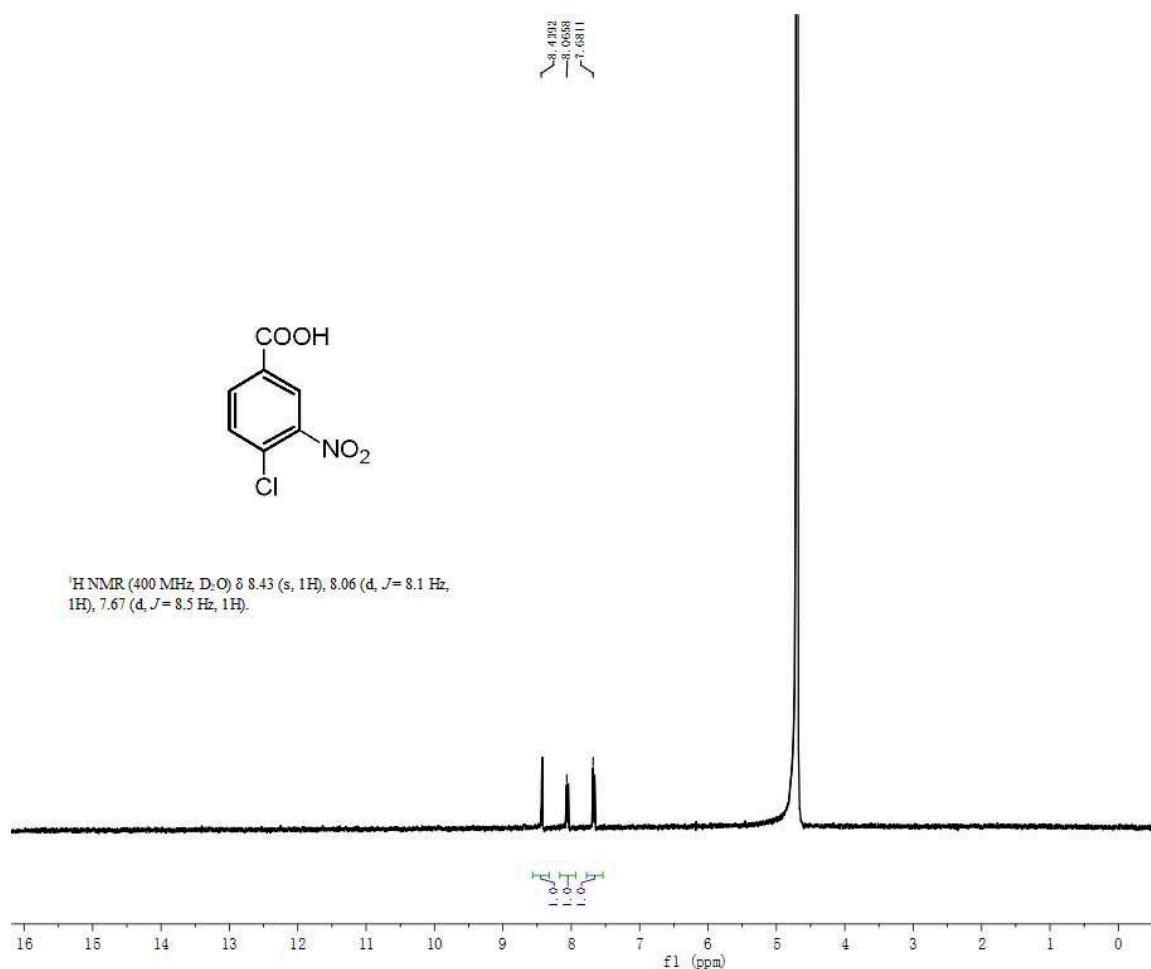


Figure S1. <sup>1</sup>H NMR spectrum of cnba.

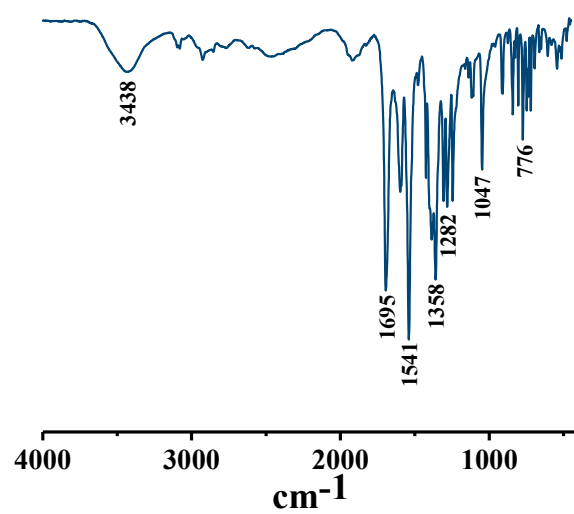


Figure S2. IR spectrum of the complex 1.

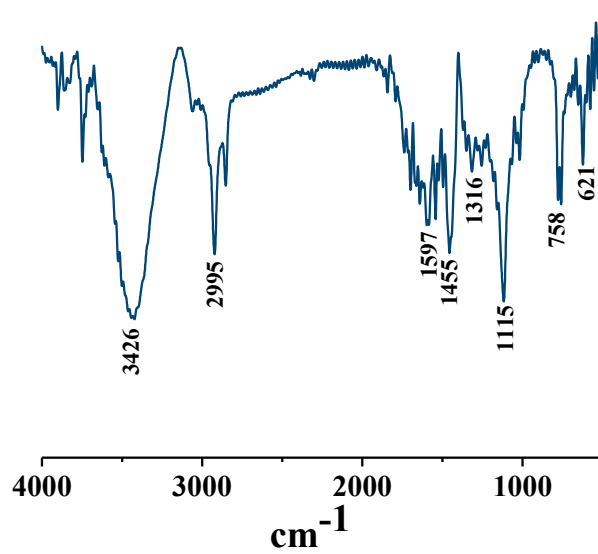


Figure S3. IR spectrum of the complex 2.

**Table S1.** Bond lengths and bond angles parameters for complexes **1** and **2**.

Bond length (Å)							
Complex 1				Complex 2			
Cu(1)-O(1)	1.9354(17)	Cu(1)-N(1)#1	2.010(2)	Cu(1)-O(1)	1.9380(18)	Cu(1)-N(1)	1.999(2)
Cu(1)-O(1)#1	1.9354(17)	Cu(1)-N(1)	2.010(2)	Cu(1)-O(1)#1	1.9380(18)	Cu(1)-N(1)#1	1.999(2)
Bond angle (°)							
Complex 1				Complex 2			
O(1)-Cu(1)-O(1)#1	97.03(11)			O(1)-Cu(1)-O(1)#1	96.54(12)		
O(1)#1-Cu(1)-N(1)	91.11(8)			O(1)#1-Cu(1)-N(1)#1	169.97(8)		
O(1)#1-Cu(1)-N(1)#1	168.87(7)			O(1)-Cu(1)-N(1)#1	91.47(9)		
O(1)-Cu(1)-N(1)	168.87(7)			O(1)-Cu(1)-N(1)	169.97(8)		
O(1)-Cu(1)-N(1)#1	91.11(8)			O(1)#1-Cu(1)-N(1)	91.47(9)		
N(1)-Cu(1)-N(1)#1	81.90(11)			N(1)-Cu(1)-N(1)#1	81.25(13)		
C(7)-O(1)-Cu(1)	131.60(16)			C(7)-O(1)-Cu(1)	131.76(18)		
C(15)-N(1)-Cu(1)	112.53(15)			C(8)-N(1)-Cu(1)	114.68(17)		
C(20)-N(1)-Cu(1)	128.95(17)			C(12)-N(1)-Cu(1)	126.0(2)		